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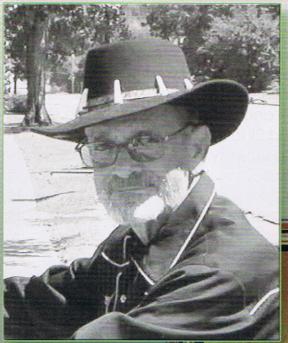
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Sparrow and Blue Jay Mini Plaques



# Scrolling Projects:



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The Ruston Clock



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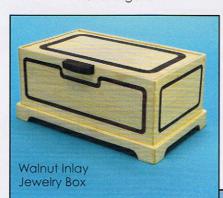




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Hummingbird



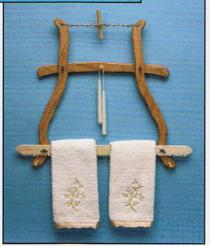
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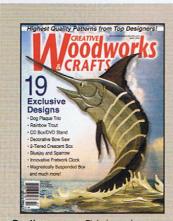
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Antique Bow Saw Reproduction



On the cover: This issue's cover features the Marlin by Bruce Worthington and Janette Square. Background image supplied by @istockphoto.com/GiorgioFochesato.





# **Gone to the Dogs**

patterns by Jacob Fowler, cut and finished by Wayne Fowler



### Introduction

We received requests for more dog breed patterns after our Bloodhound, Dalmatian, and Norfolk Terrier patterns were featured in the magazine last year. These three are "the best of the rest," and we hope you enjoy making them!

The Rottweiler was cut from a 1/2"-thick piece of very hard golden locust that had some interesting yellow features, and which was purchased from Edgar Werner, my local wood supplier. The finished English Setter was cut from what I believe is a piece of 5/8"-thick cypress. (I found it in my "interesting looking and cheap" wood pile, so I can't verify that it truly is cypress, but it cut like it!) The Saint Bernard was cut from a piece of 3/4"-thick grey elm that was also retrieved from my wood pile. All three pieces were cut on an Excalibur EX21 saw.

### INSTRUCTIONS

Step 1. Photocopy the patterns, saving the originals for future use. Apply a layer of clear packing tape to the wood, and attach the dog patterns to the tape using temporary-bond spray adhesive. The tape reduces the burn from the tight turns you will have to make while cutting the design, and it makes the piece easier to handle.

**Step 2.** Drill for all entry holes, and cut out the pieces. I recommend using a No. 5R blade for the majority of the

cuts to reduce chipping on the bottom of the piece. Use a No. 2R blade to cut the finer features, if desired.

**Step 3.** Remove the patterns. If you used packing tape, simply peel off the tape. Otherwise, remove the patterns using your method of choice.

**Step 4.** Sand both sides of the pieces and smooth the outer edges of the ovals using a disc or belt sander. Round over the outer edges and polish the surfaces using the sander fitted with a very fine (400- or 800-grit) belt or disc. Remove any remaining burrs and lightly round the edges using a piece of 220- or 400-grit sandpaper.

**Step 5.** Clean the piece using a clean paintbrush or other tool of choice. Apply a thin oil, such as walnut, tung, or a combination of both, to seal the inner edges.

Step 6. When cut from thin stock, the dogs can easily be displayed hanging from a window or placed in frames. Thicker pieces can be displayed set into oval bases, for which a pattern is provided. The wood for the base should be at least 3/4" thick because of the way in which the dog will be mounted into it. Photocopy the base oval pattern, and carefully re-size the slot to match the thickness of the finished dog. Cut the perimeter of the base, then fret-cut the slot out of the center. (It is better to err on the side of



### SUPPLIES

Wood: hardwood of choice\*—one piece 1/4" to 3/4" x 10" x 7" (for each dog), one piece 3/4" x 6-3/4" x 3" (for optional base)

Tools: scroll saw with No. 2R and/or No. 5R blade; drill with assorted bits; fixed disc or belt sander with assorted-grit discs or belts; router (optional)

Temporary-bond spray adhesive 220- or 400-grit sandpaper Clear packing tape Finishing oil of choice, such as tung, walnut, or Danish

\*Use a light- to mid-brown colored wood, such as oak or grey elm, for the Setter; a light- to dark-brown colored wood, such as walnut, for the Rottweiler; and a yellow or light-brown colored wood, such as grey elm or ash, for the Saint Bernard.

Please refer to all manufacturer's labels for proper product usage.

caution and cut the slot too small, rather than too bia.) Test-fit the dog into the base. It should fit 1/4" to 1/2" into the slot, and stand erect. The piece should be snug fitting, and should not separate from the base when lifted. If necessary, sand the slot a bit wider until the piece fits properly. When satisfied with the fit, rout the perimeter of the base, sand it, and apply a coat of thin oil. Send questions concerning this project to: Wayne Fowler, 33 Longmeadow Cres., Markham, Ontario, Canada L3R 3J6; or email him at: fantasiesisaw@rogers.com. **English Setter** 

### from the editor's desk



Welcome to this edition of Creative Woodworks & Crafts! There's an inspiring story on page 62, entitled "Lighting The Way: An Intarsia Experience." In it, Dirk and Karen Boelman tell how they accepted a commission for the Wisconsin Lions' recently-constructed health lodge. Amazingly, this was their

first intarsia project! Measuring four feet by five feet, it weighs

about one hundred pounds and includes over two hundred fifty pieces. The reason they chose intarsia as their medium was this—the health lodge assists over fifteen hundred kids a year who have various physical challenges, many of whom are visually impaired. Intarsia, being a very three dimensional art form, allows these children to "visualize" the project through their sense of touch. One lesson which jumps out at me from Dirk and Karen's experience is the power of persistence—it was one



Dirk and Karen Boelman with lighthouse intarsia.

thing to take on this assignment, but the process of actually bringing it to life, especially as their first attempt in this medium, was not for the faint of heart! You'll simply have to read the story to get all the fascinating details!

We've also got a few projects in this issue which benefit greatly from the application of a little color—Sheila Landry's Sparrow and Blue Jay, and Billie Holm's Rainbow Trout. It's really eye opening to see how, in all three cases, the tasteful application of paint brings the projects to

life. Many scrollers have shied away from painting, assuming that it's too involved, too difficult, or too time consuming. What Sheila, Billie, and others have demonstrated is that it doesn't have to be that way—a little color can go a long way, especially when applied sparingly to the right projects. In fact, in our last issue, Sheila presented an article about this very subject, and she received some encouraging feedback from readers who had steered clear of



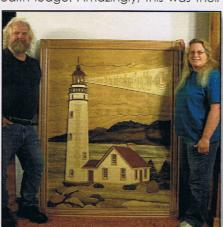
painting in the past, but now realized that it was within their reach to enhance their scrolling projects with the tasteful application of color.

Our Readers' Gallery continues to inspire us-I am awed by you, our audience—your skill, imagination, and tenacity in bringing your woodworking projects to life. Please keep those photos coming—we do love hearing from you.

We hope, as always, that you will enjoy this issue and be able to use some of the patterns, ideas, and inspiration contained within it. Until the next time, wishing you all peace, prosperity, and happy woodworking!

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Robert A. Becken







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# **Rainbow Trout**

by Billie (BJ) Holm





### SUPPLIES

Wood: wood of choice—one piece 1/2" x 8" x 11"; Baltic birch plywood—one piece 1/8" x 8" x 10" (for backer)
Tools: scroll saw with No. 5 skip-tooth blades; drill with small bits; clamps; router (optional)

Temporary-bond spray adhesive

Sandpaper, assorted grits

Tacky glue Tack cloth

Acrylic paints in assorted colors, including agua blue, black, brown, dark green, leaf green, pink, and white (optional)

Liner brush

Clear satin spray finish, or clear finish of choice Sawtooth picture hanger (optional)

### Introduction

As an artist and designer, I am always on the lookout for interesting and colorful subjects for my scroll saw patterns. While there are many types of fish that would make terrific designs, none caught my eye like the Rainbow Trout, and I learned a great deal about them while researching this project.

The Rainbow Trout is native only to the rivers and lakes of North America, predominantly west of the Rocky Mountains. Rainbow Trout, also called Redband Trout, are gorgeous fish, with coloring and patterns that vary widely depending on habitat, age, and spawning condition. They are torpedo-shaped and generally blue-green or yellow-green in color, with a white underbelly, small black spots on the back and fins, and a pink streak along the sides. They are members of the salmon family and, like their salmon cousins, can grow quite large. They average about 20 to 30 inches in length and weigh around 8 pounds, but they can grow much larger.

One final interesting tidbit about Rainbow Trout...they are quite tasty!

### INSTRUCTIONS

Step 1. Sand the wood, and use a tack cloth to remove all dust.

**Step 2.** Photocopy the pattern, saving the original for future use. Using temporary-bond spray adhesive, attach the pattern to the wood.

Step 3. Drill pilot holes for all the inside cuts. Also drill a pilot hole on the inner line of the frame section.

Step 4. Make all inside cuts of the fish design. DO NOT cut the inner line of the oval frame yet.

**Step 5.** Tilt the scroll saw table 5° to the right. Thread the blade through the pilot hole on the inner line of the frame. Cutting in a counter-clockwise direction, cut along the line. This will separate the oval frame piece from the center fish panel. Return the scroll saw table to 0°. Cut the perimeter of the frame. Carefully remove the pattern from the frame and the center panel. Set the center panel aside.

continued on page 12

**Step 6.** Round over the inner and outer edges of the frame. (If desired, rout a decorative ogee edge on the perimeter of the frame.) Sand the frame piece until the surface is smooth, and remove all sanding dust using a tack cloth.

Step 7. Reinsert the cutout pieces into the center fish panel to provide additional stability to the piece while

sanding it. Gently sand the surface until it is smooth, and remove all sanding dust using a tack cloth.

**Step 8.** Set the center panel piece on the plywood, and lightly trace the perimeter of the panel onto the plywood. Cutting 1/8" inside the traced line, cut out the plywood backer board. Sand the plywood smooth.



**Step 9.** Paint the backer board using light aqua blue paint. Add swirls of white paint to resemble water. When dry, apply one coat of clear satin spray finish, and let dry.

Step 10. To paint the fish, use acrylic paints thinned with water to create a "wash" of color. Place a small drop of paint onto a palette, plate, or plastic lid. Place a drop of water next to the paint. Use the brush to pull a little bit of the water to the edge of the paint, and mix it until it is very thin. (Leave the remaining paint for shading.) Paint the log using a very thin wash of dark green paint. Shade the log by applying a little more of the same color, though not as thin a mixture. The log should appear as though it is covered with moss. (If desired, apply a wash of leaf green paint to the lighter areas.) Use the liner brush to paint the narrow twigs and branches. Use thinned white paint to highlight the top of the log and branches. (Imagine sunlight shining onto the water from the top left, and then you can "see" where to

apply highlights or shading to create a more realistic appearance.

**Step 11.** Paint the rocks using thinned shades of gray, brown, and black. Highlight the tops of the rocks using thinned white paint. Paint the wave lines above the fish using thinned white and aqua paints, referring to the photo as a guide.

Step 12. Paint the top third of the trout using thinned medium green paint. Apply deeper green shading along the upper edge of the trout and on all the fins. Paint the eye white. Apply thinned pink paint to the middle of the fish, and thinned white paint to its underside. (For the best effect, the wood should be allowed to show through the paint.) Let all paint dry completely.

**Step 13.** Apply two light coats of clear satin spray finish to the painted panel, and let dry.

**Step 14.** Position the backer behind the center panel, with the painted side showing behind the cutout fish. Glue the backer in place using tacky glue. Apply clamps, or place a heavy weight on the assembly, and let dry completely.

Step 15. Insert the center panel into the frame from the front, and push it to the back until it "locks" into place. (It should recess approximately 1/4".) Apply two to three coats of clear finish to the completed project, allowing each coat to dry thoroughly before applying the next.

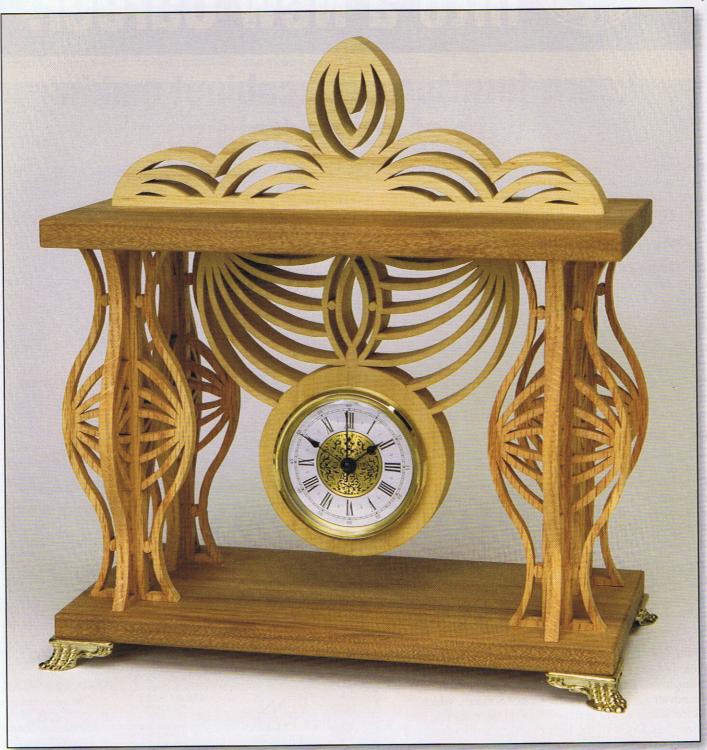
**Step 16.** If desired, attach a picture hanger to the center back of the frame. (Place a 1/8"-thick piece of scrap wood under the hanger to bring the hanger level with the center panel section. This will allow the piece to hang flush to the wall.)

For questions concerning this project, please email Billie at BJHolm51@yahoo.com.



# **The Ruston Clock**

by Dan and Ray Wilckens



### Introduction

This lovely clock would be a perfect accent for a mantelpiece or front hallway table. The optional gold box feet add an elegant finishing touch, highlighting the gold tones in the clock face. While the intricate columns may appear to be difficult to create, they are actually constructed by simply gluing a half column section to both sides of a full section. We hope you enjoy making this latest addition to the Wilckens' collection of clock patterns.

### SUPPLIES

Wood\*: wood of choice—two pieces 1/2" x 5" x 10" (for base and top floor), one piece 3/4" x 6" x 6" (for clock front); wood of choice in contrasting color—eight pieces 1/4" x 1-1/4" x 6-1/2" (for half columns), four pieces 1/4" x 2-3/4" x 6-1/2" (for full columns); wood of choice in third color—one piece 3/4" x 3-1/4" x 9-1/4" (for crown); scrap wood—one piece 1/2" x 2-1/2" x 7-1/2" (for spacing jig)

3-1/4" x 9-1/4" (for crown); scrap wood—one piece 1/2" x 2-1/2" x 7-1/2" (for spacing jig)

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 Sandpaper, assorted grits Wood glue Oil finish of choice

2-3/4"-diameter mini clock insert, requiring 2-3/8"-diameter hole\*\* Gold-finish box feet (optional)\*\*

\*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

Please refer to all manufacturer's labels for proper product usage.

### INSTRUCTIONS

Preparing the wood

Step 1. Copy the patterns, saving the originals for future use. After selecting your wood, plane it to the proper thickness. Cut the wood to the size of the patterns. All straight-edge pieces should be cut to size on a table saw or equivalent for accurate dimensions and straight edges. Cut scroll saw edges to be oversize.

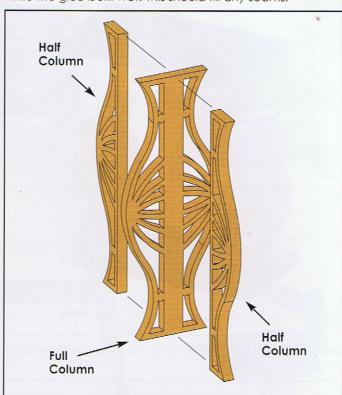
**Step 2.** Attach the patterns to the appropriate wood pieces using temporary-bond spray adhesive. Align the straight edges of the patterns with the straight edges of the wood you have cut.

**Step 3.** Using a small drill bit, drill a hole in the waste area of each cutout. Feed the scroll saw blade through the small holes and cut along the lines. Feed the blade through the next hole and so on, making all the interior cuts first. For exterior cuts, you can cut in from the edge or drill a small hole just outside the exterior line.

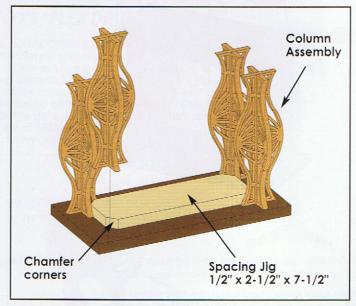
**Step 4.** Remove the patterns from the pieces by carefully peeling them off. Sand the pieces using a belt sander or handheld sander. Remove any burrs and clean up any cuts using an *X-Acto* knife or a needle pick.

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.

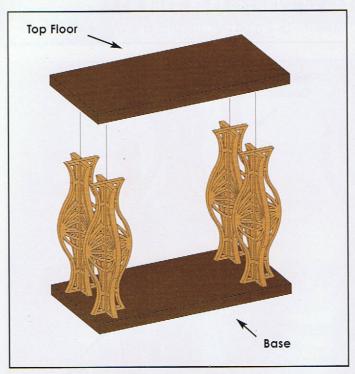


**Step 5.** Center and glue a Half Column to each side of a Full Column, aligning the top and bottom edges. Repeat for the remaining six Half Columns and three Full Columns, for a total of four column assemblies.

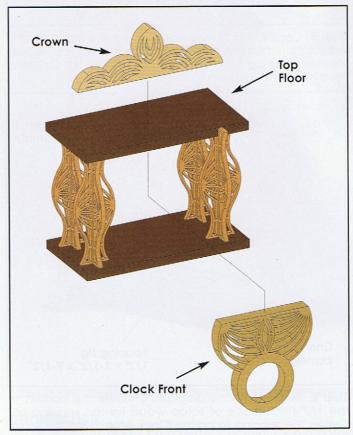


**Step 6.** Referring to the diagram, chamfer the corners of the 1/2"-thick piece of scrap wood for the spacing jig. Center the spacing jig on the Clock Base. Using the jig for placement, position and glue the column assemblies to the base, being careful not to glue the jig to the base or columns. When dry, remove the jig.

continued on page 16

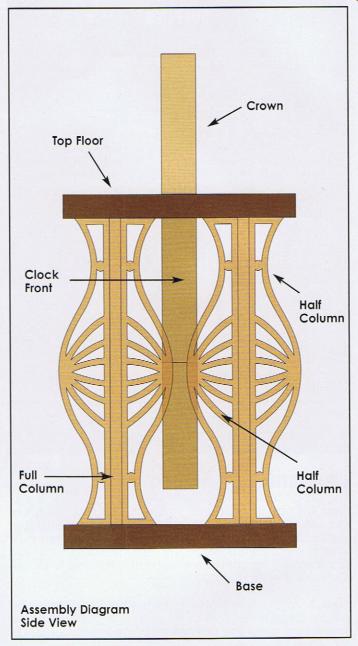


**Step 7.** Center the Top Floor on the column assemblies, and glue in place.



**Step 8.** Center the Clock Front on the bottom side of the Top Floor, and glue in place. Center the Crown on the top side of the Top Floor, and glue in place.

**Step 9.** Let glue dry for one hour. Apply your oil finish of choice following the manufacturer's instructions, and let dry completely. Install the clock insert. If desired, attach a box foot to each corner of the base.



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



# **Antique Bow Saw Reproduction**

by Wayne Bosler III



### Introduction

I recently visited an antique shop that had a large number of old tools on display—any woodworker's delight! There were many different styles of saws hanging on the wall, but the old bow saw was the one that caught my eye. The turnbuckle that holds the blade tight is a great feature. I didn't have my camera with me, so I made a quick sketch and took a few measurements. I thought it might make a good-looking rustic towel rack. I ended up making two for our home—one with pegs for the towel rack, and one without pegs that displays one of my wife's grandmother's handmade quilts.

### SUPPLIES

Wood: oak or wood of choice—one piece 1/2" x 9" x

drill with assorted bits and 3/8" countersink; router with 3/8" roundover bit; orbital sander with assortedgrits sandpaper Carbon paper

Wood glue

Delta acrylic paint in No. 2021 dark chocolate and No. 2049 spice brown, or No. 2022 light chocolate and No. 2067 leaf green (optional)

Golden oak stain

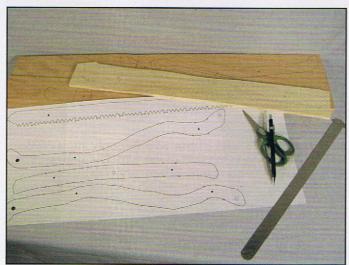
Paintbrush

Spray lacquer or finish of choice

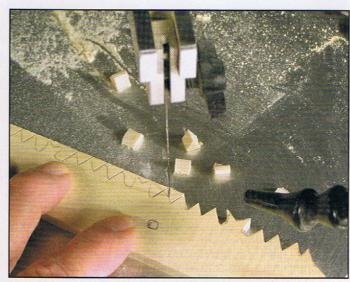
Three 1-3/4"-long shaker pegs (optional)

### INSTRUCTIONS

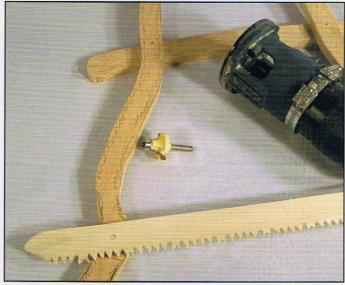
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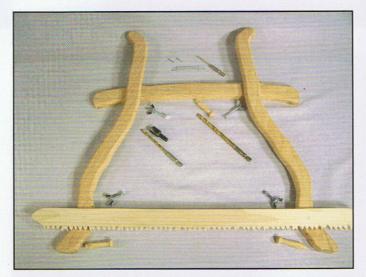
Step 1. Photocopy the patterns, saving the originals for future use. Sand all the work pieces on both sides. Using carbon paper, transfer the patterns to the appropriate pieces of wood. Also transfer the markings for the locations of the drill holes. (Note that the three holes for the pegs are optional.)



Step 2. Cut out the two side pieces and the center support piece. To cut the blade, I found that it was much easier to first cut all of the left sides of the teeth, then all of the right sides. Once you position the wood at the proper angle, the cutting goes much faster than the back-and-forth method. (As far as I'm concerned, anything that can make this cut go faster is good because I find it boring!)



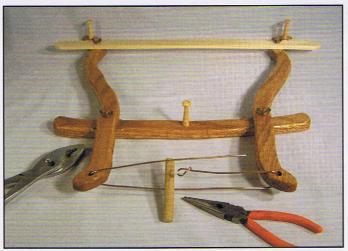
Step 3. Using a router and a 3/8" roundover bit, round the sides and center support pieces. Do NOT round the edges in between the points marked by "X"s on the patterns; they should be left flat. These are the sections where the blade meets the sides, and the sides meet the center support. Also, do not round over any of the back edges of the pieces. (If you don't have access to a router, you can round over the pieces using a moto tool or by hand.) Sand all pieces.



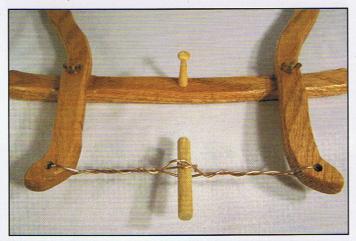
Step 4. Drill a 5/16"-dia. hole where indicated in each side piece to accommodate the wire. Drill 5/32"-dia. holes in the sides, center support, and blade where indicated to accommodate the screws and wing nuts. Drill 1/4"-dia. holes in the side and center support pieces for the pegs. (If desired, more or less pegs can be used, or they can be placed in different locations.) Countersink the holes for the screws and wing nuts on the backs of the pieces using a 3/8" countersink bit. (If you choose not to countersink the holes, longer screws will be required.) Test-fit the pieces, and adjust as necessary. (The center support should be positioned behind the two side pieces, and the blade should be placed on top of the sides.) When satisfied with the fit, disassemble the project.



Step 5. Apply your stain of choice to the wood pieces, and let dry. I wanted to make the screws and wing nuts look old and rusty, so I applied a combination of spice brown and dark chocolate paint to them. For a very old appearance, use a combination of leaf green and light chocolate paint. (If desired, also paint the saw blade using the combination of paints to give it the same metallic appearance.)



Step 6. Assemble the pieces, and secure the wing nuts. Cut a 22-1/2"-long length of wire. (I like the look of copper wire, so I skinned off the insulation from a length of 12-2 electrical wire.) Drill a 3/32"-dia. hole, (or the appropriate-sized hole to accommodate the thickness of your wire), into the center of the 3"-long dowel. Make a loop in one end of the wire. Insert the other end of the wire through the top hole in the left side of the saw, fold the wire back over itself, thread the dowel onto the wire, and insert the wire through the top hole in the right side of the saw.



Step 7. Insert the end of the wire through the wire loop, and make a loop in this end of the wire. Cut off the excess wire to create a complete closed wire loop with the turn buckle dowel in the center. When turning the buckle to tighten the wire, remember that the turn-buckle assembly is just decorative. Turning it too tightly could easily break your project. The wing nuts and screws hold the pieces securely together. The saw as shown in the photo has approximately four turns of the buckle in the wire, but this will vary depending upon how much slack you left in your wire. Turn the dowel just until the wire is tight and you are satisfied with its appearance. If desired, the wire can be painted the same color as the wing nuts and screws to add to the rustic appearance. Attach the sawtooth hanger to the back of the center support, referring to the pattern for placement. If using the shaker pegs, glue them in place, and let dry.

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







# **Startled Mallard Mini Clock**

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



### INSTRUCTIONS

**Step 1.** Photocopy the patterns, saving the originals for future use. Trim the patterns to fit the wood. Apply a thin coat of temporary-bond spray adhesive to the back of the patterns, and allow the adhesive to set up until it feels sticky, like masking tape. Attach the upright pattern to the 1/4"-thick maple, and attach the base pattern to the 1/2"-thick maple. Apply a layer of clear packaging tape over the patterns. (The tape lubricates the blade as you cut, which reduces burning and extends the life of the blade.)

**Step 2.** Drill for all entry holes on the clock upright piece. Use a drill fitted with a Forstner bit to cut the clock opening. (Alternatively, use a scroll saw to cut out the opening.) Using a No. 2/0 or No. 2 reverse-tooth blade, make all interior cuts in the design. Do not cut the perimeter of the pattern yet. Cut the base using a No. 5 blade.

**Step 3.** Stack the upright piece on top of the piece of plywood, and secure the two pieces using tape. Cutting

### SUPPLIES

Wood: maple or hardwood of choice—one piece 1/4" x 8" wide x 8" tall (for upright), one piece 1/2" x 3" wide x 9" long (for base); Baltic birch plywood—

one piece 1/8" x 8" x 8" (for backboard) Tools: scroll saw with No. 2/0 or No. 2 reverse-tooth blades and No. 5 blade; drill with 1/16" bit and optional Forstner bit; router with 1/4" roundover bit

Temporary-bond spray adhesive Sandpaper, medium- and fine-grit

Clear packaging tape

White craft glue

Spray paint in black or color of choice

Polyurethane spray in satin finish or finish of choice Mini-clock insert requiring 1-3/8"-diameter opening

Please refer to all manufacturer's labels for proper product usage.

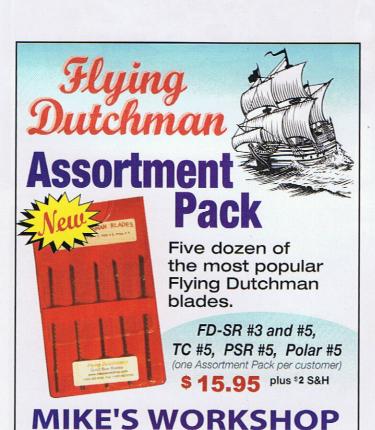
through both thicknesses of wood, cut along the perimeter of the pattern. This will ensure that the backboard exactly matches the border of the scrolled piece.

Step 4. Separate the two pieces, and remove all tape. Apply three coats of satin-finish spray polyurethane to the upright using short, even strokes. Allow each coat to dry before applying the next, and lightly sand the surface between applications.

Step 5. Spray paint the edges and both sides of the backboard. When dry, apply white craft glue to the back of the upright, and position it on top of the backboard, aligning all edges. Place a weight on top of the assembly until the alue is dry.

Step 6. Rout the edges of the base using a 1/4" roundover bit. Sand the base smooth, and apply several coats of clear finish to it. When dry, center the upright on the base, and glue in place. (If desired, the upright can be screwed to the base, instead. Simply position the upright on the base, and use a pencil to mark two reference drill points on the base and on the bottom of the upright. Drill 1/16"diameter holes at the marks on the base, drilling all the way through the piece. Countersink the holes on the bottom of the base 1/4". Drill the corresponding holes in the upright, position it on the base, and insert 1/2"-long wood screws up through the base to secure the pieces.)

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.



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7	.045"	.017"	11.5	3/4" to 1 1/2" hardwood	or
9	.053"	.018"	11.5	1 1/2" to 2 1/2" hardwood	\$65 / 100 pk
12	.062"	.024"	9.5	straight-line cutting	



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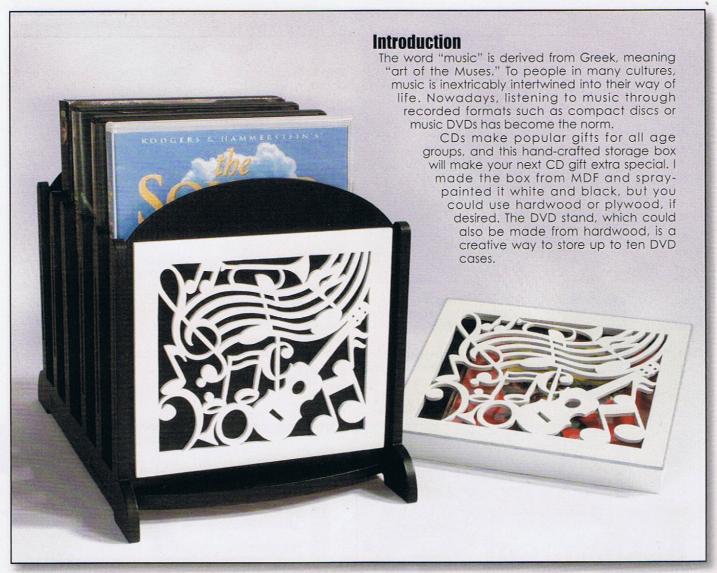
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# **CD Gift Box and DVD Stand**

by Sue Mey



### SUPPLIES

For DVD stand: MDF (medium-density fiberboard)—one piece 1/4" x 9-1/2" x 6-7/8" (for base), six pieces 1/8" x 6-7/8" x 6-1/2" (for dividers), two pieces 1/4" x 10-1/4" x 6-1/4" (for sides), one piece\* 1/8" x 5-3/4" x 5" (for overlay)

For CD gift box: MDF—one piece 5/8" x 6-3/4" x 6" (for frame), two pieces\* 1/8" x 6-3/4" x 6" (for base and lid), one piece\* 1/8" x 6" x 5-1/4" (for lid rim)

Tools: scroll saw with No. 7 and No. 3 reverse-tooth blades or blades of choice; drill press or hand drill with 1/16" and 1/32" bits; disc sander; clamps; scraper blade

Temporary-bond spray adhesive or glue stick Wood glue

Thin double-sided tape

Masking tape

Clear tape

Sandpaper, assorted grits

Hard-bristled paintbrush

Damp cloth

Spray paint in matte white and black or colors of choice

\*I recommend stacking additional pieces of MDF with these work pieces when cutting.

Please refer to all manufacturer's labels for proper product usage.

### INSTRUCTIONS

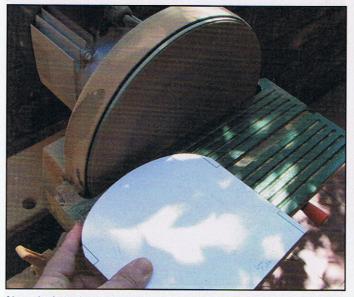
Cutting

Step 1. Stack the six work pieces for the stand dividers, and secure the stack using small pieces of double-sided tape. Also stack and tape the two work pieces for the stand sides. (I recommend stacking extra layers of MDF with the box lid, lid rim, and stand overlay work pieces. Stacking these pieces allows for more controlled cutting of the thin material. It also provides the added benefit of having an additional piece available should one break during cutting or sanding!)

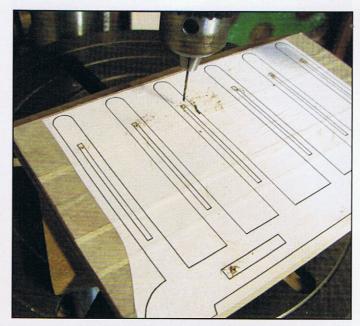
**Step 2.** Photocopy the patterns, saving the originals for future use. Apply a layer of masking tape to the top of each work piece. Using temporary-bond spray adhesive or a glue stick, attach the patterns to the taped surfaces.



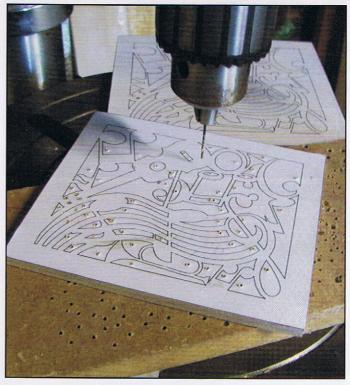
**Step 3.** With the exception of the box frame and box base pieces, use the disc sander to sand the straight edges of all the pattern pieces up to the pattern lines. For the box frame and the box base pieces, sand to 1/4" beyond the pattern lines.



**Step 4.** If desired, the curved sections of the stand dividers and base can also be sanded up to the pattern lines. Alternatively, they can be cut using the scroll saw.



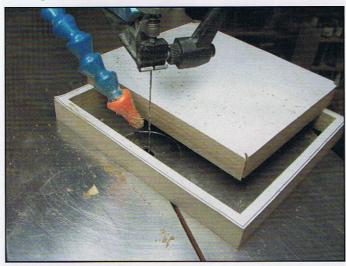
**Step 5.** Use the 1/16" bit to drill the blade entry holes for the stand sides, the box frame, and the box lid rim. Also use the 1/16" bit to drill the blade entry holes for the larger openings in the box lid and the stand overlay pieces.



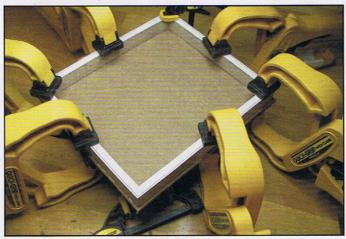
**Step 6.** Use the 1/32" bit to drill for the very small openings in the box lid and the stand overlay pieces.

continued on page 26

**Step 7.** Remove the burrs created by drilling the holes by running a scraper blade along the back of the pieces.



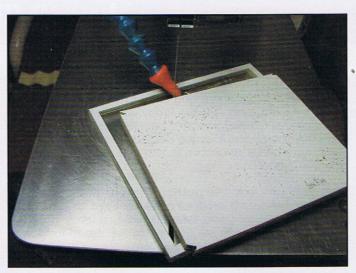
**Step 8.** Thread the No. 7 blade through the blade entry hole, and cut the interior opening of the box frame. Use sandpaper to sand the interior surface of the box frame.



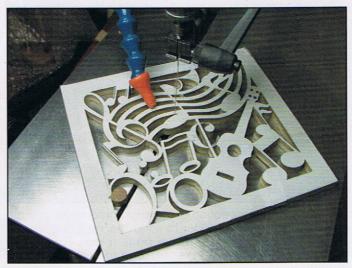
**Step 9.** Apply wood glue to the box frame, and center it on the box back piece. Clamp until dry.



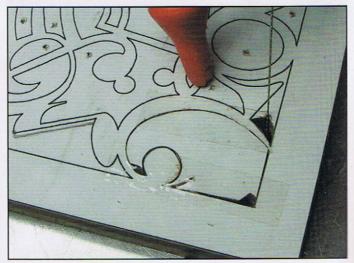
**Step 10.** Using the No. 7 blade, make all cuts for the stand dividers and stand sides.



**Step 11.** Use the No. 3 blade to cut the interior opening of the box lid rim and to cut the stand base piece.



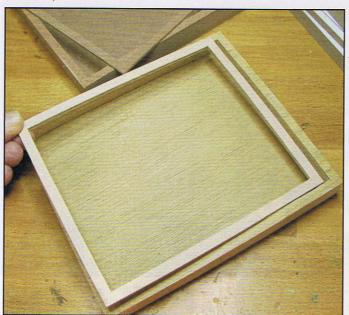
**Step 12.** Also use the No. 3 blade to make the cuts in the stand overlay and the box lid pieces.



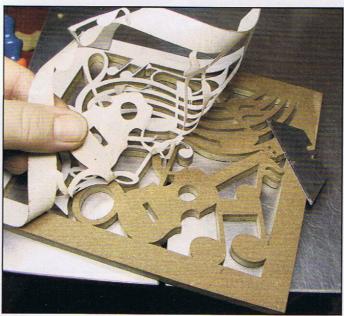
**Step 13.** To provide additional stability for the fragile areas while cutting, replace the waste cutouts in the work piece

and secure them using clear tape. Slow down the speed of your saw, being careful not to break off any delicate pieces.

### Assembly



**Step 14.** Remove the clamps from the box frame/back assembly. Use the disc sander to sand up to the pattern lines. Test fit the box lid rim to the box frame/back assembly. The lid rim piece should fit just inside the opening. If necessary, sand to achieve a proper fit.

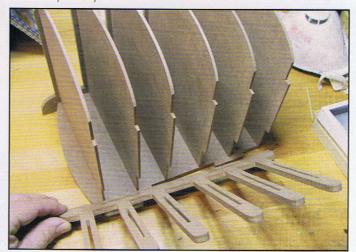


**Step 15.** Remove the tape and patterns from all the work pieces, and carefully pry the stacked pieces apart using a scraper blade.

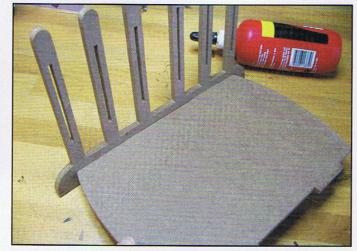
**Step 16.** Lightly sand all the work pieces and soften the edges using 320-grit sandpaper. Remove all sanding dust using a hard-bristled paintbrush.



**Step 17.** Position the box lid rim on the inside of the box lid, and secure with wood glue. Apply clamps, and allow the assembly to dry.

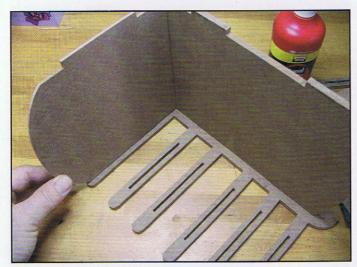


**Step 18.** Test fit the work pieces for the stand. Make any necessary adjustments by sanding or cutting the pieces as needed until you have achieved a good fit.



**Step 19.** Use wood glue to assemble the stand. First, insert the tab on one side of the base into the slots of one of the side panels.

continued on page 28



**Step 20.** Working quickly, insert the tabs of the dividers into the slots of one side panel.



**Step 21.** When all six dividers are in place, turn the assembly on its side, and glue the other side panel in place. Remove any excess glue using a damp cloth. Allow the stand to dry.

### Painting



Step 22. Apply black spray paint to all the surfaces of the

box and stand. Allow each coat to dry thoroughly before applying the next. In between applications, lightly sand the edges using 500-grit sandpaper and wipe away all sanding dust.



**Step 23.** Apply a light coat of white spray paint to the interior opening of the box. Also apply several coats of white spray paint to the outer surfaces of the box, the box lid, and the front of the overlay for the stand, allowing each coat to dry before applying the next.



**Step 24.** Use wood glue to secure the stand overlay to the front of the stand. Apply clamps, and allow the glue to dry completely.

I live in Pretoria, South Africa, and I enjoy all the various aspects of scroll sawing. I can be contacted viz e-mail, at sue@scrollsawartist.com or suem@storage.co.zo. To see more of my work, including patterns and pattern-making tutorials available for purchase, viswww.scrollsawartist.com.



# **Sparrow and Blue Jay Mini-Plaques**

by Sheila Landry

### **SUPPLIES**

Wood: curly maple or wood of choice one piece 1/4" x 6-1/2" wide x 10-1/2" long; thin mahogany veneer or veneer of choice—one piece 4" wide x 8" long (for backgrounds)

Tools: scroll saw with No. 2 and No. 2/0 reverse-tooth blades; drill press with assorted small bits; handheld orbital sander with assorted grits (120-400) sandpaper; vacuum with soft brush attachment

Temporary-bond spray adhesive 2"-wide clear packaging tape Clear-drying wood glue

Acrylic paints in black, brown (light, medium, and dark), dark grey, medium blue, and white\*

Satin spray varnish or clear finish of choice Two-part epoxy glue (for attaching hangers)

Lightweight picture hangers (two)

\*Refer to color swatch chart for suggested shades

Please refer to all manufacturer's labels for proper product usage.



### Introduction

I used curly maple for these two songbird plaques because I love its mottled appearance and the way its texture still shows through the paint, helping the birds come to life. However, any light-grained wood will work well if curly maple is not available.

The painted detail on the plaques requires minimal effort and painting skill. Using only seven paint colors (including black and white!), you can achieve a beautiful effect simply by following the scroll-sawn lines. Of course, the plaques could always be left natural, but I encourage you to try your hand at painting them.

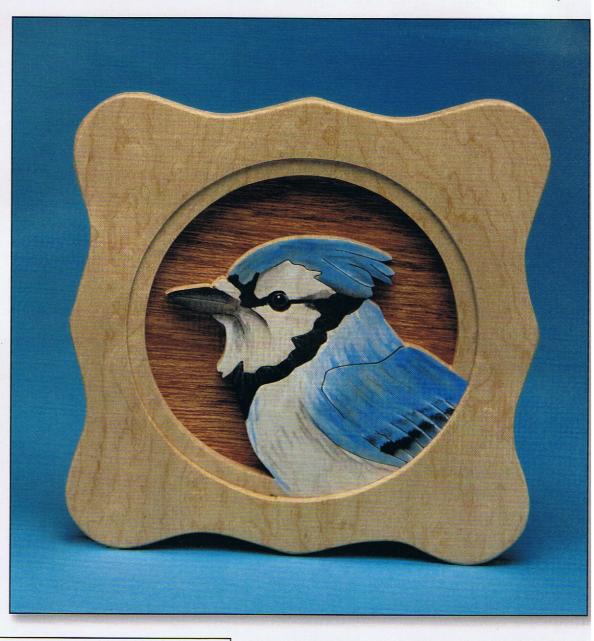
To make the painting process even easier, I have included a basic color chart for your reference. The color swatches will give you an idea of what I mean by a label such as "light brown." It may be helpful for you to take the chart to the craft store with you when selecting your paints. Remember, though, that there is a great variance in color and shades in nature, even within the same species, so don't get too concerned with matching the colors exactly.

Look for two additional songbird plaques to be featured in an upcoming issue of the magazine. In the meantime, have some fun with the sparrow and blue jay, and let's see if we can coax the inner artist within you to surface!



is

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# Blue Jay and Sparrow Color Swatches Dark Brown Dark Grey Light Brown Medium Blue Medium Brown

### **INSTRUCTIONS**

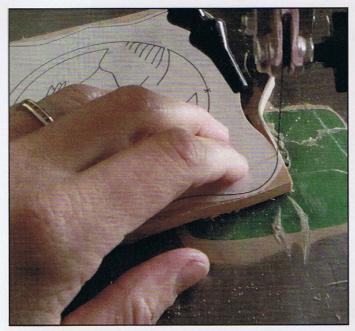
Cutting

**Step 1.** Using the handheld orbital sander and 120-grit sandpaper, sand both sides of your wood to remove any planer marks and to smooth the surface. Graduate to 220-grit sandpaper, then 400-grit, until the surface is satin smooth. This will make it much easier to finish your project after you have cut the design. Vacuum all dust from the wood using the vacuum with the soft brush attachment.

**Step 2.** Photocopy the patterns, saving the originals for future use. Lightly mist the back of the patterns with

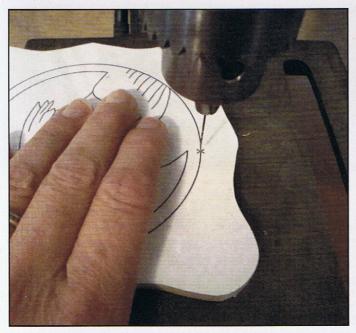
continued on page 32

temporary-bond spray adhesive. Allow the spray to tack up for a few seconds until it feels as tacky as masking tape, and apply the patterns to the wood piece. Pay attention to the grain direction when positioning the patterns. Place a layer of clear packaging tape over the entire surface of the design to help prevent the wood from burning while cutting.

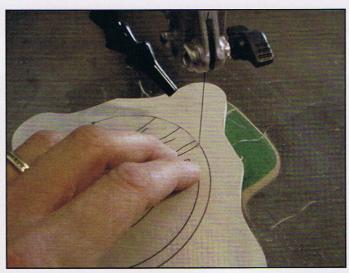


**Step 3.** Using the No. 2 reverse-tooth blade, cut the outer perimeter of the plaques.

**Step 4.** Using a very small bit, drill all the entry holes in the designs.



**Step 5.** Use a 1/16" bit to drill an entry hole at the "X" where indicated on the interior opening line on each pattern.



**Step 6.** Tilt the scroll saw table  $10^\circ$  to the left, so the left side is lower than the right. Lock the table into place. Using the No. 2 reverse-tooth blade and cutting in a clockwise direction, cut along the interior circle of each plaque. Return the scroll saw table to  $0^\circ$ .

**Step 7.** Lightly sand the back of the interior pieces so that the drill holes are flush with the bottom, and the pieces sit flat on the scroll saw table.



**Step 8.** Using the No. 2/0 reverse-tooth blade, cut the bird designs on the interior pieces of the plaques.



**Step 9.** After cutting, finish sand the bird and frame pieces using the handheld orbital sander and 400-grit sandpaper. (If you do not want to paint the birds, proceed directly to Step 15 for assembly.)



**Step 10.** Paint the breast of the sparrow white, the upper body light brown, the beak dark brown, and the eye black.



**Step 11.** Referring to the photograph, shade the areas painted light brown using medium brown and dark brown paint. Follow the scroll-sawn lines for color placement. Also shade in a few feathers on the breast area.







**Step 13.** Paint the blue jay's breast, face, and back of neck white. Paint the wing and the top of the head medium blue. Lightly paint the back of the neck using medium blue paint, allowing the white to show through. Paint the beak dark grey, and paint the mask, neck, and eye black.



**Step 14.** As with the sparrow, paint additional strokes of blue, white, and grey paint in the feather areas, referring to the photo for suggested color placement. Lightly paint a very thin line of white paint around the eye, and add a tiny dot of white to the center. Allow all paint to dry thoroughly.

### Assembly and Finishing



Step 15. Position the bird plaque on the piece of veneer so the grain of the veneer runs horizontally across the plaque. Trace the perimeter of the bird plaque onto the veneer. Carefully cut along the traced line using scissors. Apply a generous amount of glue to the back of the bird plaque, and glue it to the veneer backer, aligning the edges. Place a weight on the assembly to ensure that good contact is made between the plaque and the backer, and let dry completely.

**Step 16.** When dry, use the handheld orbital sander to sand the back edges of the plaque, ensuring that the veneer backer is flush with the edge of the plaque. (Be careful not to compromise the angle of the edges.)



**Step 17.** Apply a thin bead of glue to the inner opening of the frame piece.



**Step 18.** Insert the bird plaque into the frame, and seat into place. Use a damp paper towel or cotton swab to blot away any excess glue that may ooze out. Let dry completely.

Step 19. Apply several coats of spray varnish to the piece, allowing each coat to dry thoroughly before applying the next. Glue a hanger onto the back of each plaque using two-part epoxy. (Because the plaques are so small and lightweight, the glue should be sufficient for securing the hangers in place.)

For questions concerning this project, please contact Sheila at 902-245-5865, or email her at: sheilalandrydesigns@gmail.com. To see and purchase other patterns by Sheila, and to download free brochures of her designs, visit www.sheilalandrydesigns.com.







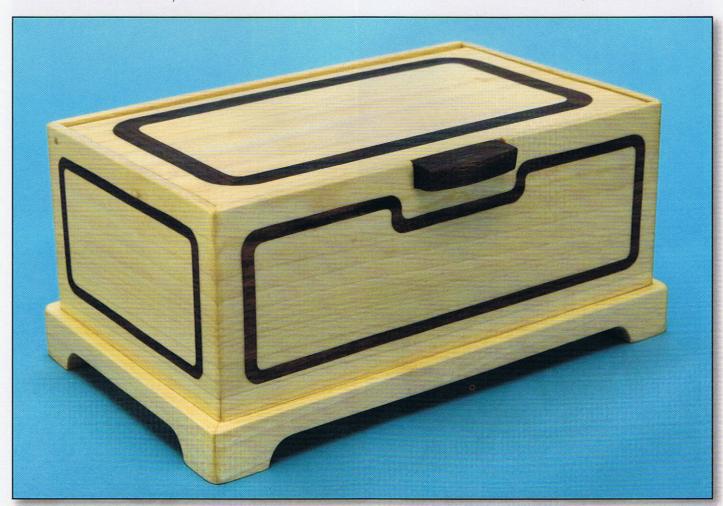
# **Walnut Inlay Jewelry Box**

by Gary MacKay

### Introduction

Making and inlaying banding using a scroll saw is an easy process that requires only two cuts. This jewelry box project utilizes that technique. Constructed from 1/4"-thick stock, the box features a 1/4"-wide walnut inlay in the poplar box sides and a 1/2"-wide inlay in the poplar lid. To save wood, the lid is made by first creating a 1/4"-thick x 1-1/2"-wide frame from the walnut, then placing it on the lid stock prior to cutting the inlay. The optional lift-out tray is handy for holding small items such as earrings or cufflinks. However, if you choose to not make the tray, wood requirements are provided to make taller compartments.

After familiarizing yourself with the technique, you can design and inlay your own customized inlay banding using this "two-cut" scroll saw technique.



### **Supplies**

Tools: scroll saw with No. 5 and No. 12 blades; drill with 1/16", 1/8", and 3/32"-diameter drill bits; table saw; belt sander; hacksaw or metal-cutting *Dremel* tool (for cutting nails); combination square with 45° angle; ruler; four screw-type clamps; four quick-grip clamps; eight scrap wood clamping blocks; large square

Temporary-bond spray adhesive Double-sided tape Clear packaging tape Masking tape Wood glue Sandpaper, assorted grits Wood filler 2"-long finishing nails (two) Felt—one piece 6" x 10", one piece 5" x 5-1/2" Poster board—one piece 6" x 10", one piece 5" x 5-1/2" Clear finish of choice

Please refer to all manufacturer's labels for proper product usage.

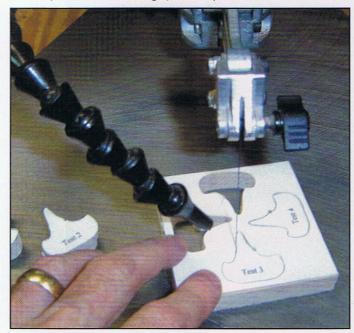
Bill of Materials				
<b>Wood</b> Poplar	Size  1/4" x 3-3/4" x 11"  1/4" x 3-3/4" x 7"  1/4" x 6" x 10"  3/4" x 1" x 11"  3/4" x 1" x 7"  1/4" x 1-1/4" x 9-1/2"*  1/2" x 1/2" x 2-13/16"  1" x 5" x 5-1/2"  1/4" x 5" x 5-1/2"	Quantity 2 2 2 2 2 1 3 4 1	Piece box front and back box sides lid front and back legs side legs long compartment divider short compartment dividers lid stops (estimated lengths) lift-out tray sides (optional)	
Walnut	1/4" x 3-3/4" x 10-1/2" 1/4" x 3-3/4" x 6-1/2" 1/2" x 1" x 3" 1/4" x 1-1/2" x 10"	2 2 1 2	front and back inlays side inlays lid knob inlay frame	
Plywood	1/4" x 5-1/2" x 9-1/2"	1	box bottom (estimated dimensions)	
Scrap wood	1/4" x 3" x 3"	2	test inlays	

\*The lift-out tray is optional. If you choose to omit the tray, raise the height of the base compartments by increasing the measurement on the long and short divider pieces from 1-1/4" to 2".



### INSTRUCTIONS

**Step 1.** Photocopy the patterns, saving the originals for future use. (You will need four copies of the box sides inlay pattern, two copies of the front/back legs pattern, and two copies of the side legs pattern.)



Step 2. Stack the two pieces of the 3" x 3" scrap wood, and secure the stack using several strips of double-sided tape. Using temporary-bond spray adhesive, attach the test inlay pattern to the top of the stack. Drill four 1/16"-diameter holes where indicated on the pattern. Tilt the right side of your scroll saw table down 3°. Cutting in a counterclockwise direction, cut out one of the pattern segments. The bottom piece should drop out, and the top piece should fit snugly into the hole in the bottom blank. If the top fits too tightly into the bottom piece, decrease the tilt of the table and make another test cut. If it fits too loosely into the bottom piece, increase the tilt of the table and make another test cut. Continue testing until you have determined the best angle for your table.

Step 3. Center one 1/4" x 3-3/4" x 6-1/2" walnut piece on one poplar 1/4" x 3-3/4" x 7" piece, and secure the stack using double-sided tape. Cut along the outer lines of a box sides inlay pattern, and attach it to the top of the stack using temporary-bond spray adhesive. In the same manner, stack the second 1/4" x 3-3/4" x 6-1/2" walnut piece and 1/4" x 3-3/4" x 7" poplar piece, and attach a box sides inlay pattern to the top.

**Step 4.** Center one walnut 1/4" x 3-3/4" x 10-1/2" piece on one poplar 1/4" x 3-3/4" x 11" piece, and secure the stack using double-sided tape. Cut along the outer lines of a box sides inlay pattern. Cut the pattern in half along the center line. Using temporary-bond spray adhesive, adhere one pattern half to the left side of the stacked walnut piece, and the other pattern half to the right side of the stacked walnut piece. Use a pencil and ruler to connect

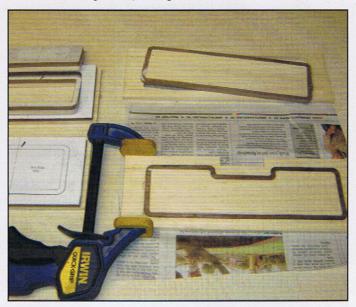
the pattern lines. In the same manner, stack the second 1/4" x 3-3/4" x 10-1/2" walnut piece and 1/4" x 3-3/4" x 11" poplar piece, and attach the two halves of a box sides inlay pattern to the top of the stack.

Step 5. On one of the stacks with the 10-1/2"-wide walnut on top, measure half the distance across, and make a pencil mark at 5-1/4". Draw a 90° line at that mark. Cut out a front inlay pattern and position it on the walnut. Align the center line of the pattern with the center line just marked on the wood, and align the 1/4"-wide pattern lines. Attach the pattern to the wood using temporary-bond spray adhesive. (This piece will be used for the box front. Note the section at the top of the front inlay pattern that will be cut out for the knob after the inlay bands have been cut.)

**Step 6.** Adhere a layer of clear tape over all the pattern lines. With the right side of your scroll saw table tilted to the pre-determined angle, use a No. 5 blade to make the "1st Cuts" where indicated on the pattern on the four stacked pieces. Remove all sawdust. Use a toothpick to place wood glue into the saw kerfs, and clamp closed using quick-grip clamps. Let dry completely.

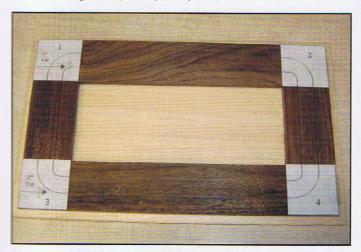
**Step 7.** Remove the clamps, and make the four "2nd Cuts" where indicated on the pattern on the stacked pieces. (Make sure to keep the cut-out sections with the correct stacks.)

**Step 8.** Reset the table to 90°. On the box front piece, cut out the rectangular opening for the knob.



**Step 9.** Unstack the pieces from one stack. Save the center poplar piece, the 1/4"-wide walnut banding piece, and the outer poplar piece. (Set the remaining pieces aside.) Test-fit the three pieces, and when satisfied with the fit, glue the center poplar piece into the inlay banding. Place glue around the banding and into the open saw kerf, and insert the assembly into the outer poplar piece. Clamp the assembly until the glue is completely dry. Repeat the process for the remaining three stacks.

**Step 10.** Cut two pieces measuring  $1-1/2" \times 5-1/2"$  from the walnut inlay scrap wood. Using these two pieces and the two  $1/4" \times 1-1/2" \times 9-1/2"$  inlay frame pieces listed in the Bill of Materials, make a 1-1/2"-thick frame measuring  $5-1/2" \times 9-1/2"$  with 45° mitered corners. Glue the mitered corners, and let the glue dry completely.



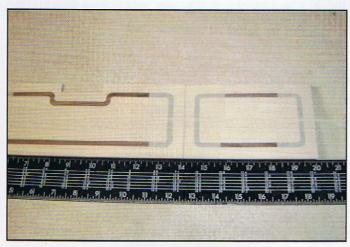
Step 11. Center the walnut frame on one 1/4" x 6" x 10" poplar lid piece. Secure the frame to the poplar using double-sided tape. Cut out the lid inlay pattern, and then cut along the center lines to create four corner patterns. Align pattern section 1 with the upper left corner of the frame, pattern section 2 with the upper right corner, pattern section 3 with the lower left corner, and pattern section 4 with the lower right corner. Attach the pattern pieces to the wood using temporary-bond spray adhesive. Using a pencil and ruler, draw pattern lines connecting the 1/2"-wide bands. Apply a layer of clear tape over the pattern lines.

Step 12. Set your scroll saw table to the correct angle determined from the test inlay process. Referring to the "1st Cut" arrow on the pattern, make the 1st cut on the lid piece. Next, make the "2nd Cut" as marked on the pattern. Return the scroll saw table to 90°. Separate the walnut and poplar pieces. Glue the center poplar piece into the walnut band, glue the walnut band into the outer poplar section, and glue the saw kerfs closed. Let the glue dry completely.

Step 13. Using the belt sander, sand one surface of the inlaid lid work piece. Apply wood glue to the sanded surface, and stack the inlaid lid work piece on the remaining 1/4" x 6" x 10" poplar lid stock. Clamp the lid stock together until the glue has completely dried.

Step 14. Sand both surfaces of the two box sides, the box back, and the box front. Measure and mark 1/2" over from the outer edge of the 1/4"-wide inlay band to the short end of each box side, back, and front piece. Draw a line at each mark. The box side pieces should measure 6" wide between the two penciled lines, and the box front and back should measure 10" wide between the two penciled lines. Make 45° miters along each penciled line. (If you are using a table saw to make the miter cuts, it is safest to cut

several "sawdust only" passes to the pencil line. Small pieces of cut-off stock can be thrown around the shop when cut off by a table saw.)



**Step 15.** Place the four pieces mitered-side down on the work space, alternating the box sides with the box front and back. Align the bottom edges with a straight edge. Place 2"-wide masking tape over the ends of the pieces, leaving extra tape extending off the last piece.

**Step 16.** Turn the assembly over, and apply wood glue into the mitered areas. Fold the sections up to form the box, and wrap the extra end of tape around the corner to secure the assembly. Place the box into a square to ensure 90° corners, and clean up any glue squeeze-out.

Step 17. Using temporary-bond spray adhesive, attach the front/back legs patterns and side legs patterns to the appropriate stock. Cut out the four pieces using a No. 5 blade. Cut a 45° miter along the short ends of all four pieces. Place the leg pieces mitered-side down on the work space, alternating short and long pieces. Align the bottom edges with a straight edge. Place 2"-wide masking tape over the ends of the pieces, leaving extra tape extending off the open end of one piece. Turn the assembly over, and apply wood glue into the mitered areas. Fold the sections up to form the base, and wrap the extra end of tape around the corner to secure the assembly. Place the base into a square to ensure 90° corners, and clean up any glue squeeze-out. Let dry completely.

**Step 18.** Remove the masking tape from the base assembly and the box sides assembly. Sand off any dried glue, and round over the corners. Apply wood glue to the bottom of the box sides. Center the box sides assembly on the base. (A 1/4"-wide border of the base should be visible all the way around the box sides.) Clamp the box sides onto the base, clean up any glue squeeze-out, and let the glue dry.

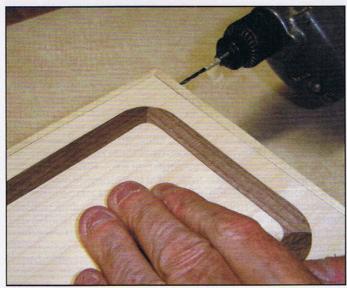
**Step 19.** Measure the interior of the box. Transfer the measurements to the box bottom stock, and cut out the box bottom. Insert the box bottom into the box, and glue in place.

Step 20. If making the lift-out tray, adhere the pattern to the 1"-thick poplar stock for the tray sides. (Alternatively, two pieces of 1/2"-thick stock could be glued up to reach the necessary thickness.) Drill four 1/8"-diameter blade-entry holes where indicated on the pattern. Use a No. 12 blade to cut out the compartment openings. (Save one of the cut-out waste pieces if you plan to line the compartments.)

**Step 21.** Glue the tray sides piece to the tray bottom piece, and let dry. Using the No. 12 blade, cut the outside profile of the tray.

**Step 22.** Using temporary-bond spray adhesive, attach the lid knob pattern to the lid knob stock. Using a No. 5 blade, refer to the pattern to make a straight, 5/8"-long side cut. Back the blade out from the cut. Tilt the left side of the table down 10°, and cut the curved portion of the knob. Return the saw table to 90°. Remove the pattern.

**Step 23.** Measure the distance from the box bottom to the bottom of the cut-out for the lid knob. Cut four lid stops based on this measurement. Glue two stops to the inside front corners of the box. Place the two other stops in the inside back corners of the box, but do not glue them in place.



Step 24. Test to ensure that the hole created by a 3/32"-diameter drill bit will provide a tight fit for your finishing nails. (The nails will be used as the hinges for the box lid.) Place the lid on the box, resting it on the lid stops. Drilling through the box sides and into the lid, drill 1"-deep holes on both back sides. The holes should be 1/2" in from the back of the box and 1/4" down from the top of the box.

Remove the two rear lid stops, and temporarily insert the nails into the drilled holes. Check if the lid can freely swing open; if not, round over the back edge of the lid using the sander until it opens smoothly. With the lid in place, glue the lid knob onto the front edge of the lid. Carefully remove the nails, and set the lid aside.

Step 25. Stack the three work pieces for the short compartment dividers, and secure the stack using double-sided tape. Using temporary-bond spray adhesive, attach the short compartment divider pattern to the top of the stack. Attach the long compartment divider to the 9-1/2"-long poplar work piece. (If the lift-out tray has been omitted and 2"-tall divider pieces are being used in place of the 1-1/4"-tall pieces, simply be sure to align the notched line of the pattern with one long edge of the work piece.) Using the No. 5 blade, cut out the long and short divider pieces. Separate the stack, and remove all patterns.

**Step 26.** Sand the dividers, tray, lid, and box. Apply your finish of choice to all pieces, and let dry.

Step 27. Glue the felt to the poster board using wood glue. Measure the dimensions of the box bottom, transfer those measurements to the back of the larger piece of felt-lined poster board, and cut out the box bottom liner. Using one of the scraps from the lift-out tray compartments as a pattern, place it pattern-side down on the other piece of felt-lined poster board, trace the outline, and cut out. Repeat three more times for a total of four squares for compartment liners.

**Step 28.** Glue the compartment liners into the lift-out tray. Glue the box bottom liner into the bottom of the box. When dry, set the long compartment divider into the center of the box, and insert a short divider piece into each notch. Adjust the fit as necessary, and glue the dividers in place.

Step 29. Place the lid on the box, and insert both nails all the way into the holes. Using masking tape, mark the nails at the point where they protrude from the box sides. Remove the nails, and use a hacksaw or *Dremel* cutting tool to cut the nails approximately 1/16" short of the masking tape mark. Reinsert the nails; they should be recessed inside the holes. Fill the holes with wood filler. Slide the lift-out tray into the box so it rests on top of the dividers.

For questions concerning this project, please send a SASE to: Gary MacKay, 2779 Canvasback Trail, Myrtle Beach, SC 29588. Gary's book, Box-Making Projects for the Scroll Saw, is available from Fox Chapel Publishing at www.FoxChapelPublishing.com.

Woodturning



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# **Hummingbird**

by Marilyn Carmin



### Introduction

This hummingbird design was inspired by artwork of the Native Americans. With its thin, fragile areas and small pieces, it is a challenging pattern to cut. However, if you take your time, pay attention, and are careful, you should have no problem cutting this four-layered project. Enjoy!

### SUPPLIES

Wood: plywood—four pieces 1/8" x 12" x 12" (for four scroll-sawn layers), one piece 1/16" x 12" x 12" (for pattern layer)

Tools: scroll saw with No. 2 blades; drill with No. 58 bit; hot glue gun; small clamps

Temporary-bond spray adhesive

Wood glue with glue brush applicator

Masking tape

Clear spray finish of choice

Please refer to all manufacturer's labels for proper product usage.

### INSTRUCTIONS

**Step 1.** Stack the plywood pieces with the 1/16"-thick piece on top. (Although the 1/16"-thick piece is optional, I recommend using it so that the pattern can be attached to it, rather than to one of the 1/4"-thick layer pieces. When the cutting is complete, the pattern layer can simply be discarded, rather than trying to remove pattern pieces from fragile sections of wood.) Secure the stack using strips of masking tape.

**Step 2.** Photocopy the main pattern, saving the original for future use. Using temporary-bond spray adhesive, attach

the pattern to the top of the stack. (Note: The hummingbird is constructed of four layers. The base layer is created by cutting along the perimeter of the entire design. For the remaining three layers, refer to the appropriate Cutlines Guide in the pattern section. The top layers are numbered 1-3, with layer 1 being placed directly on the base layer, layer 2 in the middle, and layer 3 being the top layer of the final assembly.)

Step 3. Drill only for the holes necessary for the base layer cut. Cut the base layer, following the perimeter of the entire pattern. After cutting, remove the base layer from the stack and set it aside. Carefully realign the edges of the three remaining layers and the 1/16"-thick pattern piece. Secure the stack using masking tape.

Step 4. Referring to the Layer 1 Cutines Guide, drill for all holes required to make the cuts. Cut out Layer 1, remove it from the bottom of the stack, and set it aside. Carefully realign the edges of the two remaining layers and the pattern piece, and secure the stack usin masking tape.

**Step 5.** Referring to the Layer 2 Cutlines Guide, drill for all holes needed for Layer 2, and make the cuts. Remove Layer 2 from the bottom of the stack, and set it aside. Carefully align the edges of the remaining pattern pieces with the Layer 3 pieces, and secure using masking tape.

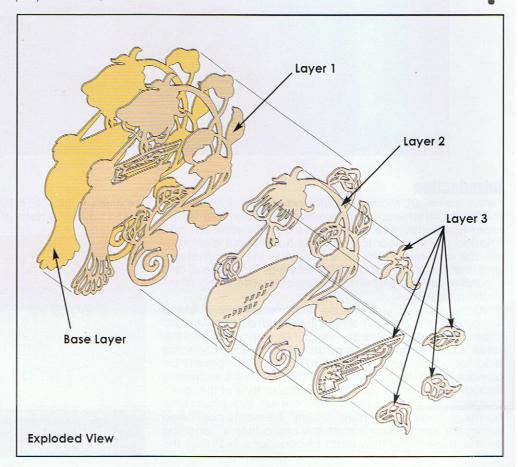
**Step 6.** Referring to the Layer 3 Cutlines Guide, drill for all holes needed for Layer 3 (top layer), and make the cuts. Separate the 1/16"-thick pattern pieces from the Layer 3 pieces, and discard the pattern pieces.

Step 7. Carefully sand all pieces as needed.

**Step 8.** Test-fit the Layer 1 pieces on the base layer, the Layer 2 pieces on Layer 1, and the Layer 3 pieces on Layer 2. When satisfied with the arrangement, carefully remove the pieces. Glue the Layer 1 pieces to the base layer, clamp, and let dry. In the same manner, glue the Layer 2 pieces to Layer 1, and the Layer 3 pieces to Layer 2.

**Step 9.** Apply several coats of clear spray finish to the project, allowing the first coat to dry thoroughly before applying the next.

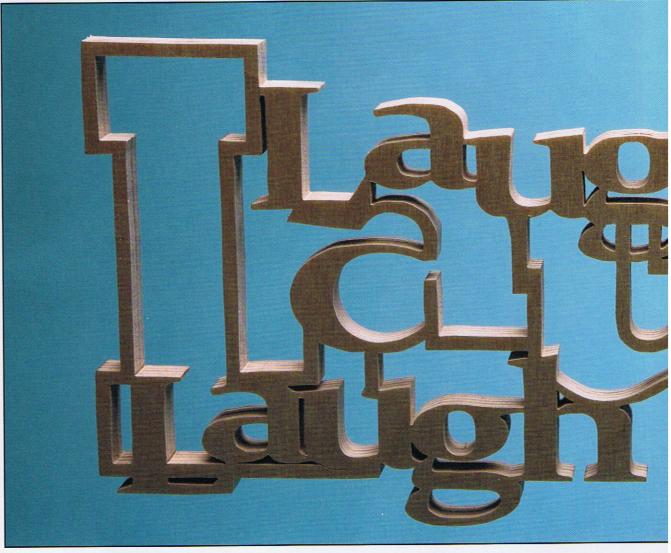
For questions concerning this project, send a SASE to: Marilyn Carmin, 4569 NE 78th Place, Portland, OR 97218.





### **Lots of Laughs**

by Toni Burghout of Chrestensen Burghout Designs



### Introduction

"Aww, come on, Mom. We both know you're laughing on the inside!" That was the statement heard from across the room as my daughter summarized our conversation and headed out the door to catch her bus. Always a character, she and her brother often provide me with material and inspiration for patterns. This day was no different, and I found myself playing with Ricki's words while sitting at my drafting table.

At first glance, "Lots of Laughs" is a combination of the word "laugh" shown in simple fonts, contained within a drawn border of the large "laugh." However, as with the other word art patterns I create, I tried to capture some additional meaning. That meaning may not always be obvious in the words themselves, but rather it is expressed through the arrangement of the words or style of the font.

It wasn't until I had test cut this pattern that I found the humor in it—with the three "laugh" elements positioned within the surrounding border, this piece truly is "laughing on the inside!" You may want to consider substituting the

1/4"-thick Baltic birch plywood with wood measuring at least 1"-thick to help play up that design component.

#### SUPPLIES

Wood: Baltic birch plywood—one piece 1/4" x 6-1/2" high x 15" wide

Tools: scroll saw with assorted blades; drill with assorted small bits

Temporary-bond spray adhesive

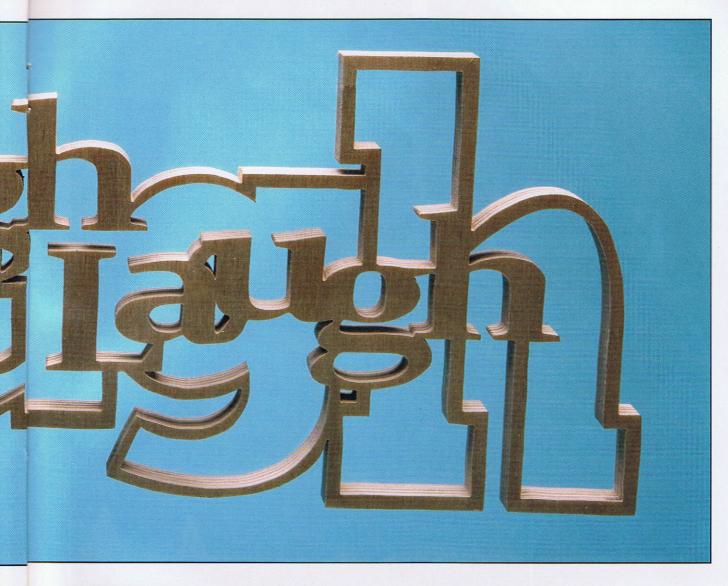
Sandpaper, assorted arits

High-quality painter's tape

Pencil

Finish of choice

Please refer to all manufacturer's labels for proper product usage.



### INSTRUCTIONS

**Step 1.** Lightly sand the surface of the wood, and remove any dust. Apply a layer of painter's tape to the top of the wood. Photocopy the pattern, saving the original for future use. Using temporary-bond spray adhesive, attach the pattern to the taped surfaces of the wood, carefully smoothing out the pattern to ensure there are no wrinkles.

Step 2. Using a pencil, mark an "X" where pilot, or feeder, holes will need to be drilled. Using a drill press and small bit, drill a hole at each mark. Turn the wood over, and lightly sand the back of the piece to remove any tear-out. (This will make it easier to feed the blade through the pilot holes.)

**Step 3.** Make all the inside cuts first. (Leaving the surrounding wood intact provides you with a uniform edge, which will help while you pivot and maneuver the wood as you feed it into the blade.)

**Step 4.** After making all the inside cuts, cut the perimeter of the design, releasing the piece from the surrounding wood.

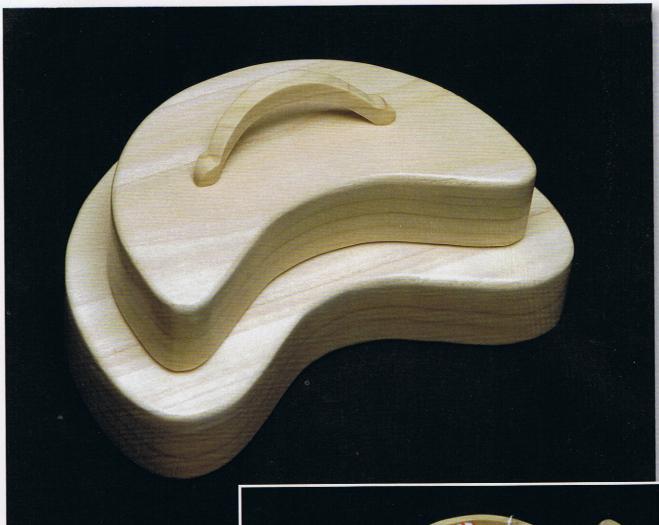
**Step 5.** Carefully peel off the pattern and the painter's tape. Using sandpaper or a sanding pad, remove any burrs from the cut edges. Vacuum off any remaining dust, and apply your finish of choice following the manufacturer's instructions.

For questions concerning this project, please email Toni at toni@chrestensenburghoutdesigns.com. To view other projects by the design team of Toni Burghout and Sue Chrestensen, based in Orillia, Canada, please visit their website, www.chrestensenburghoutdesigns.com.



### **Tiered Crescent Box**

by Diana Thompson



### Introduction

While recently trying to untangle my necklace from the links of my bracelet, it occurred to me that if they were stored in separate boxes, this wouldn't happen! In the interest of not taking up additional room on my dresser, (which is already crowded with too much "girl" junk!), I came up with this two-tiered box. I hope you will find it as handy as I have.

To make the box, I used a beautiful, almost pure-white piece of poplar

that I bought at a local home improvement store. You will notice in the supplies list that the lower tier sides are constructed from 1/2"-thick material, and the upper tier sides from 3/4"-thick material. This is not a mistake! As you progress with construction, the reason becomes clear. I recommend closely reading through the instructions several times before beginning this project, and carefully following the step photos during the process because it can be a bit confusing. (Note that there are no separate patterns for the lid tops and the base; these pieces are cut after being glued to the sides pieces.)

### **SUPPLIES**

Wood: poplar or wood of choice—one piece 1/2" x 4-1/8" x 6" (for lower tier sides), one piece 3/4" x 3-1/4" x 4-3/4" (for upper tier sides), one piece 3/4" x 5" x 6-1/2" (for lower tier lid sides), one piece 3/4" x 3-5/8" x 5-3/8" (for upper tier lid sides), one piece 1/4" x 4-1/8" x 6" (for lower tier base), one piece 1/4" x 5" x 6-1/2" (for top of lower tier lid), one piece 1/4" x 3-5/8" x 5-3/8" (for top of upper tier lid), one piece 3/4" x 7/8" x 2-3/4" (for handle); scrap blocks of wood

Tools: scroll saw with No. 5 and No. 7 blades; drill with small bit; small clamps (six); small Quick Grips (two); rotary tool and router table with 1/8" roundover bit (optional); sanding mop (optional)

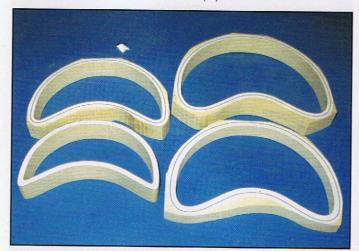
Temporary-bond spray adhesive Wood glue Glue stick (optional) Sandpaper, 220- and 400-grit 3/4"-wide cellophane tape Thumb tacks (two) Wood sealer

Clear finish of choice

Please refer to all manufacturer's labels for proper product usage.

### **INSTRUCTIONS**

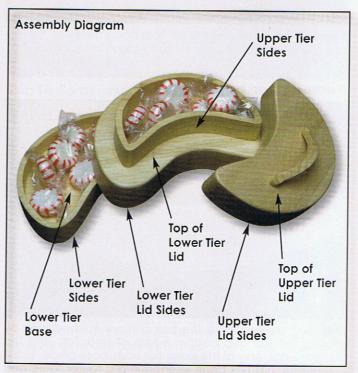
**Step 1.** Photocopy the patterns, saving the originals for future use. Using temporary-bond spray adhesive, attach the patterns to the appropriate pieces of wood. (Note that the placement guide should not be attached to the wood; it will be used in a later step.)



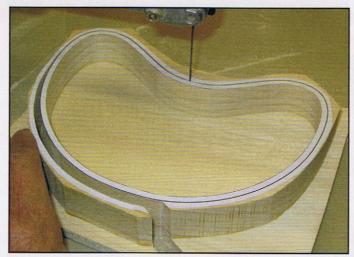
Step 2. Drill blade entry holes. Using the No. 7 blade, cut the center openings of each piece. Cut along the outer pattern lines on the upper tier sides piece. For the remaining three pieces (upper tier lid sides, lower tier lid sides, and lower tier sides), cut approximately 1/4" beyond the outer pattern lines. Do not remove the patterns. (Although you are technically finished cutting the upper tier sides piece, it is helpful to leave the pattern in place to assist with assembly later.) I recommend numbering or labeling each piece in the pattern margin or on the bottom of the piece.



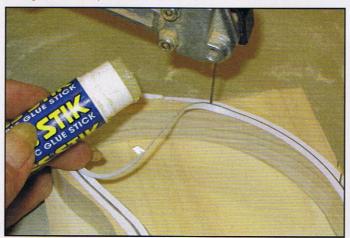
Step 3. Position the lower tier sides piece on the 1/4"-thick piece of wood for the lower tier base, and glue in place. Position the lower tier lid sides piece on the 1/4"-thick piece of wood for the top of the lower tier lid, and glue in place. Position the upper tier lid sides piece on the 1/4"thick piece of wood for the top of the upper tier lid, and glue in place. Clamp all pieces into place and let dry. (Note that only two clamps are shown for photography purposes; additional clamps are needed to correctly secure the pieces in place.) Apply the glue sparingly in order to avoid seepage into the interior openings. Use a damp cloth or unscented baby wipe to remove any glue seepage that may occur. (I always keep baby wipes in my shop. They are handy for wiping glue from your projects and from your hands. My wardrobe appreciates them because, before using the wipes, I used to simply wipe the glue off onto whatever article of clothing was accessible!)



continued on page 48



**Step 4.** When the glue is completely dry, remove the clamps. Cutting through both thicknesses of wood, cut along the outer pattern lines of the three assemblies.



**Step 5.** If any portion of the pattern becomes loose as you saw, as shown in the photo, simply use a small amount of stick glue to re-attach it. Using the spray adhesive at this point would make a sticky mess of the wood and the saw. (Please don't ask how I discovered this!)

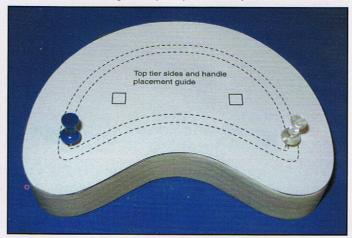


**Step 6.** If desired, give the box a more finished look by routing the top and bottom edges of both lids, and the bottom edge only of the lower tier sides/base piece. Use a rotary tool that has been inserted into a router table and

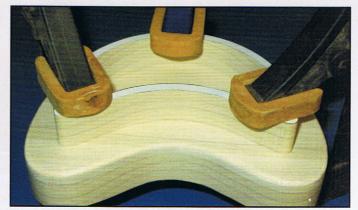
fitted with a 1/8" roundover bit. (Do not rout any edges of the upper tier sides piece.) If you prefer, the sharp edges can also be softened using 150-grit sandpaper.



**Step 7.** Sand all the pieces smooth using your method of choice. Sanding mops are excellent tools for achieving smooth finishes. I recommend using a 220-grit mop first, followed by a 400-grit mop to polish the pieces.



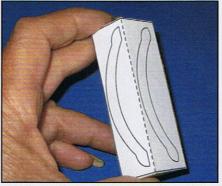
**Step 8.** Cut out the placement guide along the outer pattern lines, and position it on top of the lower tier lid. Use thumb tacks to make tiny holes at the corners of the dashed lines. The marks will be used to help align the upper tier sides on the lower tier lid. Remove the placement guide, and save it for use with the handle attachment.



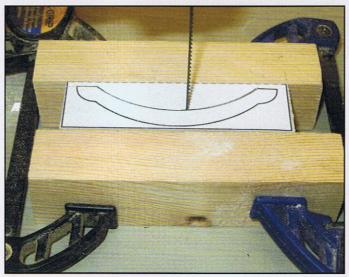
**Step 9.** Place the lower tier lid onto the lower tier sides/base assembly. (This will provide a stable surface for

the clamps.) Sparingly apply glue to the bottom of the upper tier sides piece. Using the thumb tack marks as reference, position the upper tier sides piece on the lower tier lid, and clamp in place. Let the glue dry completely before removing the clamps.

Step 10. Fold the handle pattern along the dashed line. Apply temporary-bond spray adhesive to the reverse side of the pattern, and wrap it around two sides of the 3/4"-thick wood block. Align the dashed line of the pattern with the long side of the

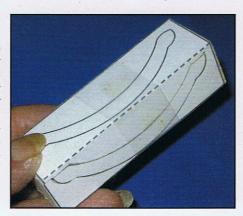


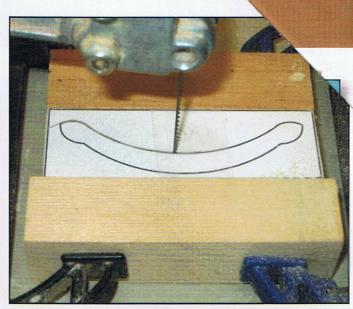
block. (The waste wood from the center opening of the upper lid sides piece can be used for the handle, if desired.)



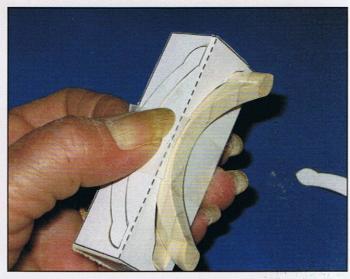
**Step 11.** Use small grips to clamp two pieces of spare stock to each side of the block. This will provide additional stability during cutting. Tighten the grips enough to hold the block, but not so tightly that they interfere with the blade moving through the kerf. Using a No. 5 blade, cut the left side of the pattern.

Step 12. Allowing the figure to rest naturally in the block, slightly pinch it together and wrap a length of 3/4"-wide cellophane tape around the block.





**Step 13.** Following the same process used for cutting the left side of the pattern, cut the right side.



Step 14. Gently remove the handle from the block.

**Step 15.** Apply wood sealer to all the box parts and the handle. (I find it is easier to finish sand the handle prior to gluing it in place.) Sand the pieces smooth using 220-grit sandpaper, then 400-grit sandpaper.

**Step 16.** Reposition the placement guide on the upper tier lid, and use thumb tacks to make small holes to mark the handle placement points. Glue the handle in place, referring to the holes for placement. Let dry completely. Apply several coats of your clear finish of choice, sanding between each application using 400-grit sandpaper. Let dry completely before stacking your finished box.

For questions concerning this project, send a SASE to: Diana Thompson, 6215 Old Pascagoula Rd., Theodore, AL 36582, or email her at: scrollergirl@aol.com. To view other designs by Diana, visit her website, www.scrollsawinspirations.com.



# The Anika Art Box

by Roy King





#### Introduction

In designing and building this box, I've tried to combine the qualities of simplicity and elegance with a surprise touch the oval container swings out for use, pivoting on two small but powerful magnets. The overall shape is very simple, yet vertical kerf lines, layered woods, and the Birdseye maple lid add texture, contrast, and a sense of style. I hope that you will enjoy making and using your Anika Art Box as much as I've enjoyed designing and building mine!



### **SUPPLIES**

Wood: birdseye maple—two pieces 1/4" x 4-1/2" wide x 6-1/2" long (for docker lid and docker base), one piece 1/4" x 3-1/4" wide x 6" long (for box bottom); maple—two pieces 3/4" x 1-1/2" wide x 5" long (for docker supports); mahogany—two pieces 1/4" x 3-1/4" wide x 5-3/4" long (for box body layers 1 and 5); Baltic birch plywood—two pieces 1/8" x 3-1/4" wide x 5-3/4" long (for box body layers 2 and 4); walnut—one piece 1/4" x 3-1/4" wide x 5-3/4" long (for box body layer 3)

Tools: scroll saw with No. 2, No. 5, and No. 7 reverse-tooth blades; drill press with small bit for entry holes and 15/32 high-speed drill bit\*; disc sander with 120-grit sandpaper; clamps; awl

Temporary-bond spray adhesive

Yellow wood glue

Sandpaper, assorted grits

Clear packing tape

Iwo Rare Earth neodymium disc magnets, 12mm (.47") diameter x 3mm (.11") thick\* Finish of choice

\*A 15/32" high-speed drill bit was used to mount the disc magnets; this size bit will create a pressure-fit mounting hole for the 12mm x 3mm magnet

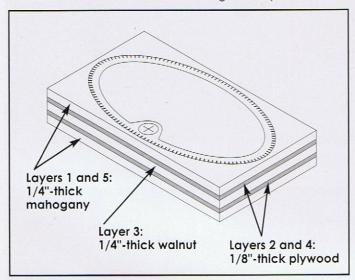
\*\*Rare Earth disc magnets are available at most hobby and craft stores or at your local hardware store. These magnets are always coated with a chrome finish.

Please refer to all manufacturer's labels for proper product usage.

### **INSTRUCTIONS**

**Step 1.** When selecting the woods to be used for this project, take care to choose pieces with interesting grain patterns, especially for the docker lid and base. Roughly cut the wood to fit the patterns. (I always like to sand the work pieces using a 150- or 220-grit quarter-sheet sander before applying the patterns to the wood. This makes it easier to finish-sand the pieces before final assembly.) Stack the two work pieces for the docker supports, and glue them together.

Step 2. Photocopy the patterns, saving the originals for future use. You will need two copies of the Docker Lid/Base pattern. Trim the patterns, apply a thin coat of temporary-bond spray adhesive to the back of the patterns, and position them on the appropriate pieces of wood. Apply the Box Body Layer pattern to the mahogany work piece for Layer 1. The pattern for the Docker Lid should be applied to the back of the lid work piece because the hole for the magnet will be drilled on the side with the pattern. Attach the Docker Support pattern to the top of the glued-up stack. Apply a layer of clear packing tape over the patterns. (The tape will prevent burn marks on the wood while cutting, and it also lubricates the saw blade for smoother and faster cutting action.)



Step 3. Stack the layers for the Box Body in the following order: Layer 5 (mahogany), Layer 4 (plywood), Layer 3 (walnut), Layer 2 (plywood), Layer 1 (mahogany, with pattern adhered to it). Using yellow wood glue, laminate the layers. (When applying the glue between the layers, use your finger or a glue applicator to spread a thin, even coat along the surface of each layer. Using too much glue will make it more difficult to align the layers, causing them to slip out of place when clamping them together.) Apply clamps or place a very heavy weight on top of the assembly to secure the layers until the glue dries, which usually requires several hours.

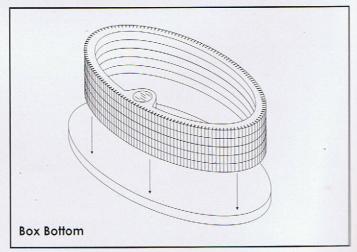
**Step 4.** Use a sharp awl to mark the center point of the hole to be drilled for the magnet on the box layer assembly. The awl mark will leave a small indentation in the pattern and wood, making it easier for you to place your drill bit in the correct location.

Step 5. Using a No. 7 reverse-tooth blade, cut along the perimeter of the Box Layer pattern. When cutting thick wood such as this, it is important to be patient and to slow down your sawing speed. Let the blade do its job. Pushing too fast will quickly heat up the blade temperature, cabing the blade to bow out at the bottom of your cut. As long as you take your time cutting, the outer surface of the stacked layers will not flare out at the bottom.

Step 6. Using a No. 5 reverse-tooth blade, cut the vertical kerf lines on the outer perimeter of the stacked layers, where indicated on the pattern. (Note: When cutting these lines, hold your blade's cutting action longer at the end of the kerf line. The scroll saw blade will cut faster on the upper end of the blade when cutting very thick wood. This procedure will allow the bottom of the blade to cut the lower end of the kerf perpendicular throughout the entire length of the kerf.)

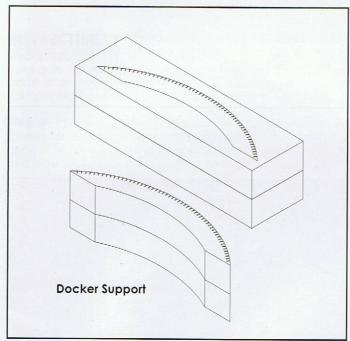
**Step 7.** Drill a blade entry hole in the interior opening of the box layers assembly. Using a No. 7 reverse-tooth blade, cut out the interior opening. Remember to be patient and slow down your cutting speed.

Step 8. Load your drill with a high-speed 15/32" drill bit. Align the point of the drill bit with the awl mark in the wood, and drill to a depth of slightly deeper than the thickness of your magnet. (Before drilling, I encourage you to practice with scrap wood to test fit your magnet to the hole. When properly drilled, the magnet will snugly fit into the hole and will not pull out. With this proper fit, it is not necessary to glue the magnet in place. Because magnets from different manufacturers may vary slightly in diameter, be sure to use a drill bit that fits the diameter of your magnet.) Before installing the magnet, determine which sides of the two magnets attract each other, and which sides repel each other. Make a small mark on the sides that repel each other to indicate the sides that should be inserted face down into the holes. (The magnet for the lid will be inserted in a later step.) Once installed, the magnets will not come out, so be sure to have them set correctly. Insert the magnet into the hole, ensuring that it is flush with the top surface of the box layers assembly. You may want to use a hammer and scrap piece of hardwood to tap the magnet securely into place.

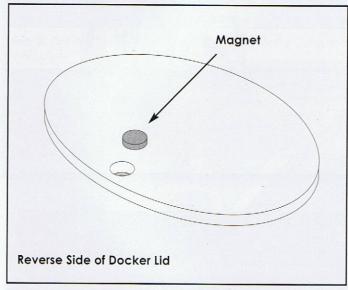


**Step 9.** Cut out the Box Bottom. Remove the pattern and apply your finish of choice to the side of the Box Bottom that will be glued to the bottom of the stacked layers

assembly. (It is much easier to apply a smooth, even finish to the piece before it is glued to the assembly.) Apply glue to the bottom edge of the stacked layers assembly, center it on the Box Bottom, and let dry.



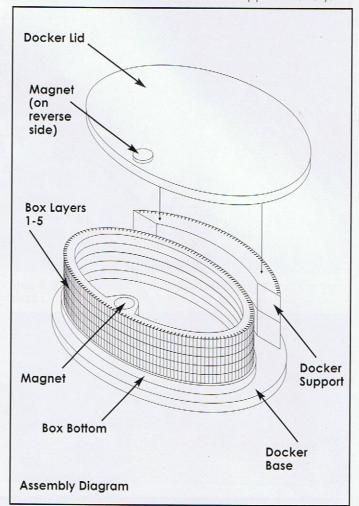
**Step 10.** Using a No. 7 reverse-tooth blade, cut along the perimeter of the Docker Support pattern. (The finished thickness of the Docker Support is 1-1/2".) Sand the piece smooth using 150- to 220-grit sandpaper. In the same manner as for the box sides, use the No. 7 blade to cut the kerf lines into the Docker Support.



Step 11. Cut out the Docker Lid and Docker Base pieces. Use a sharp awl to mark the center point of the hole to be drilled for the magnet on the Docker Lid. Load the high-speed 15/32" drill bit in your drill, align the point of the drill bit with the awl mark hole, and drill to a depth of slightly deeper than the thickness of your magnet. (Because the Docker Lid is only 1/4" thick, I highly recommend testing for the proper depth of your magnet before drilling in your good work piece. Some drill bits are pointier than others,

and you want to be sure that the tip of your anot protrude through the top of the lid. Also, you make sure that the hole is deep enough that the nisits flush with the surface of the lid. I use a homem depth gauge to test for the correct depth a few time while drilling.) In the same manner as for the box layers assembly, install the magnet in the lid piece, making sure it is facing the correct direction.

**Step 12.** Remove all patterns. Apply finish to the bottom side of the Docker Lid, the top side of the Docker Base, and the sides and ends of the Docker Supports. Let dry.



Step 13. Referring to the assembly diagram and Docker Lid/Base pattern, position the Docker Support on the Docker Base, and glue in place. Position the bottom side of the Docker Lid on top of the Docker Support, and glue in place. (Be sure the side with the magnet is facing down.) Clamp the docker assembly until the glue has dried. Apply your finish of choice to the assembly.

**Step 14.** To finish, slide the box layer assembly into the docker assembly, allowing the magnets to secure the box layer assembly in place. To open the box, simply swivel the box on the magnetic hinge.

For questions concerning this project, send a SASE to: Blackbear Hill, Ltd. - Roy King, 9033 S. Nashville, Oak Lawn, Illinois 60453; or email Roy at: artboxes1@yahoo.com.



### **Arch Fret Clock**

by Sue Mey

### Introduction

I used blonde mahogany for this clock and base, which is one of my favorite types of light-colored hardwood. However, feel free to substitute your hardwood of choice if blonde mahogany is not available in your area. If you prefer to eliminate the base and make a freestanding clock, simply use 1-1/2"-thick wood.



### SUPPLIES

Wood: blonde mahogany or other light-colored hard wood of choice—one piece 1" x 11-1/4" x 8-1/4" (for upright), one piece 1" x 12-3/4" x 3-1/2" (for base) Tools: scroll saw with No. 7 reverse-tooth blades or

Tools: scroll saw with No. 7 reverse-tooth blades or blades of choice; drill press or hand drill with 1/32" and 3/32" bits; disc sander; palm sander; table-fitted router with bit of choice (optional); compass; scraper blade

Temporary-bond spray adhesive or glue stick Wood glue Masking tape Sandpaper, assorted grits
Hard-bristled paintbrush
Sharp pencil
Deep-penetrating furniture wax liquid, or Danish oil
Medium-sized artist's brush
Lint-free cloth
Clear spray varnish

Please refer to all manufacturer's labels for proper product usage.

2-3/4"-diameter clock insert

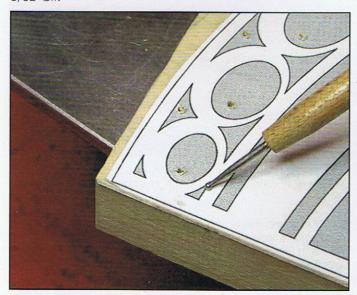
### INSTRUCTIONS

**Step 1.** Roughly cut the upright workpiece to size using the scroll saw. To reduce the amount of hand sanding to be done later, use a palm sander to sand both sides of the upright and base work pieces. Set the base piece aside.

**Step 2.** Photocopy the pattern, saving the original for future use. Apply a layer of masking tape to the top of the upright work piece. Using temporary-bond spray adhesive or a glue stick, attach the pattern to the taped surface.

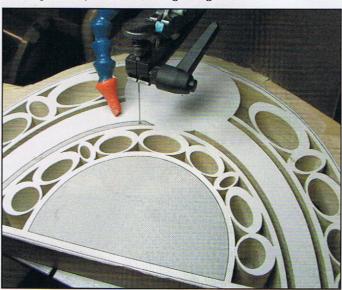


**Step 3.** Drill the majority of the blade entry holes using the 3/32" bit.



**Step 4.** Use a 1/32" bit to drill the very small holes at the base of the upright.

**Step 5.** To ensure the work piece will sit flush on the saw table, remove the burrs created from drilling the holes by running a scraper blade along the grain of the wood



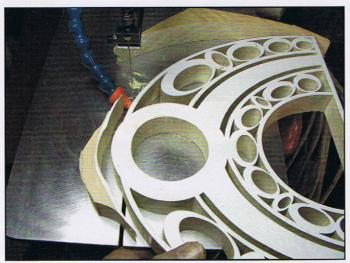
**Step 6.** Make the inside cuts on the pattern using the No. 7 blade.



**Step 7.** Determine the exact size of the opening required to house your clock insert. Use a compass to draw the appropriate-sized circle on the pattern. (Refer to the center point for the clock insert opening on the pattern when drawing the circle.)



**Step 8.** Drill the blade entry hole for the clock insert opening using the 3/32" bit. Cut the opening for the clock insert, and test-fit the insert. If necessary, sand or cut the opening to achieve a proper fit.



**Step 9.** Cut along the curved portion of the outer pattern line.



**Step 10.** Use the disc sander to straight-sand the bottom edge of the upright up to the pattern line.

**Step 11.** Remove the pattern and tape. Sand the upright and base pieces by hand using 150-grit sandpaper. Progress through 220-grit and 320-grit sandpaper, and finish with 500-grit sandpaper until you have achieved a smooth finish.

**Step 12.** Round over the curved outer edge of the upright using 100- or 120-grit sandpaper. Soften the edge using 320-grit sandpaper. Remove all sanding dust using a hard-bristled paintbrush.



**Step 13.** Use the router to rout a decorative edge of your choice on the base. (If you do not have access to a router, simply round over the top edges of the base using sandpaper.)

**Step 14.** Using the medium-sized artist's brush, apply deeppenetrating furniture wax liquid or Danish oil to the upright and base. Wipe away any excess liquid or oil using a lint-free cloth, and set the pieces in the sun to dry. (If this is not possible, set them aside to dry for a day or two.)



**Step 15.** Center the upright on the base, and glue in place using wood glue. Apply clamps, and let the glue dry completely.

**Step 16.** Apply several thin coats of clear spray varnish to the project, allowing each coat to dry before applying the next. Place the clock insert in the opening, and display your finished clock.

I live in Pretoria, South Africa, and I enjoy all the various aspects of scroll sawing. I can be contacted via e-mail, at sue@scrollsawartist.com or suem@storage.co.za. To see more of my work, including patterns and patternmaking tutorials available for purchase, please visit www.scrollsawartist.com.

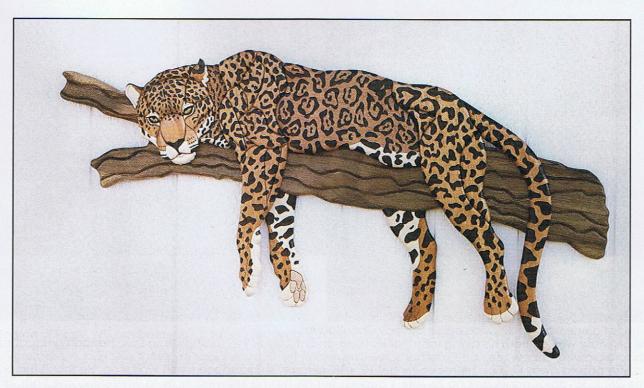
# Reader's Gallery

Orville Waltner of Moundridge, KS retired in 1991 and started scrolling six years later. He writes that he made a number of projects from Creative Woodworks & Crafts, but always passed by the intarsia projects because he thought they were too complicated. However, the ringneck pheasant by Bob Hlavacek on the cover of the September, 1998 issue greatly intrigued him, and he finally decided to try intarsia. It turned out "pretty good," and Orville was hooked!

He went through his back issues of the magazine and started making many more of the intarsia projects. Four of his pieces shown here won blue ribbons at his county fair. They include the Cornucopia by Annja Starrett, Scrolled Pheasant by Whitetail Designs, Dog with Duck by Bob Hlavacek, and Bugling Elk by Troy Lichthardt of My-Grain Creative Woodworking.

Orville mentions that he gives away many of his projects to charities for fund-raising purposes, and he sells some in order to keep him "in wood and blades!" Thank you for sharing your photos with us, Orville, and thanks also for your kind comments about the magazine.

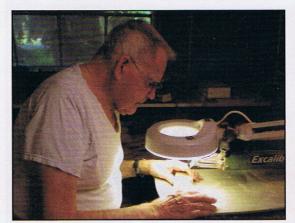




**Leonard Detloff** of Queen Creek, AZ sent us this photo of "Jaguar on Branch," designed by Kathy Wise. The 692-piece jaguar, which is made from genuine mahogany and wenge, took Leonard 155 hours to complete. Beautiful work, Leonard!

## Reader's Gallery

continued from page 57



Ken at work



Eagle by Judy Gale Roberts



**Gator Panel** 



Sampling of Ken's finished pieces

**Ken Sargent** of LaBelle, FL has been working with wood for "almost all" of his 83 years. In 1997, he began doing intarsia, and his first piece was the 37"-wide eagle by Judy Gale Roberts.

He originally worked from his dining room table, using an old, circa-1946 Craftsman jig saw. He soon graduated to a Delta scroll saw, and now uses an Excalibur scroll saw, which he considers an "excellent piece of equipment!" After Ken's wife passed away in 2001, he took over her 12' x 18' ceramic studio space for his workshop. He found the pattern for the 26" x 36" gator panel among his wife's papers, but he has no knowledge as to where it came from, or who designed it. (Editor's note: if anyone is aware of who designed this gator panel, please let us know!)

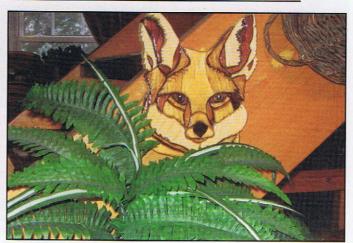
Ken uses natural woods, along with a combination of oil stains, thinned acrylic paints, and leather stains to add a broader range of colors to his projects. A unique method that Ken employs is to use a microwave to remove the paper patterns from the wood.

Your work is lovely, Ken. Thanks for sharing your photos!

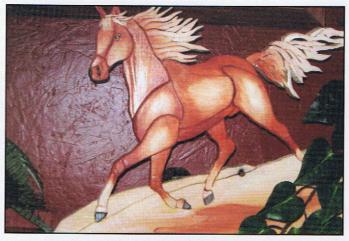


Bob Andersen of Waseca, MN first viewed Dirk and Karen Boelman's "On Eagle's Wings" (based on Isaiah 40:31) when he was at the 2007 Midwest Trade Show in Richland Center, WI. Because he liked the pattern so much, Bob went home, made his own, and entered it in the Complex Fretwork Division of the 2008 Midwest Trade Show contest. He was honored to win third place. Shown in the photo are Bob (on right) and Dirk Boelman, with Bob's prizewinning entry!









**Gail Heaton** of Rock, WV has been doing intarsia for five years. After wearing out her husband Jim's scroll saw, he set her up in her own workshop, complete with a saw and sander.

The Blackhills Buck by Al Martinson was featured in the October 2000 issue of Creative Woodworks & Crafts. It is made of cedar, poplar, and old redwood. The Largemouth Bass, from the November 2005 issue, was designed by Darin Liles and is made from cedar, poplar, pine, and redwood. The Fox, from the April 2006 issue, and the Rocky Mountain Stallion, from the March 2007 issue, were both designed by Annja Starrett. Gail used assorted shades of stain on the pine fox to add color, and she used an oil paint wash with white highlights on the pine stallion.

Thank you for letting us see these beautiful examples of your work, Gail, and we're happy to hear how much you enjoy the magazine!

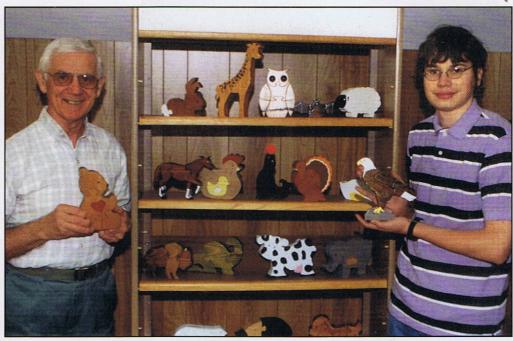
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# Reader's Gallery

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Jim Gress of Bowmansville, PA has been a woodworker for many years. After retiring 12 years ago, scroll sawing became a huge interest of his. To commemorate the first Christmas of Jim's grandson Jeromy in 1989, Jim made him a teddy bear with heart puzzle. Jim adds, "Each Christmas thereafter, a new jig saw bird or animal was a gift for Jeromy until he turned 18 and graduated from high school, which just happened in June of 2008."

Jeromy and Jim are shown here with the Christmas puzzles. The eagle that Jeromy is holding was designed by Jim and given to Jeromy the year he received his Boy Scout Eagle Award. The owl, bat, horse, turkey, polar bear, and bison were also all designed



by Jim. The remaining pieces were from patterns in the Scroll Saw Puzzle Pattern Book by Patrick and Patricia Spielman. Your grandson is lucky to have such a talented grandfather, Jim! What a beautiful collection he will have to pass on to his own children some day!

**Daniel Choate** of Woodburn, KY sent us this photo of his very first intarsia project. He started woodworking approximately 10 years ago, mainly minor scroll saw work. Although he always wanted to try intarsia, he never seemed to have the time for it. After having back surgery in 2007, he decided to use his recuperation period to finally start intarsia.

Daniel writes about how much he enjoyed the experience. It was something totally new and very challenging, and he is looking forward to doing more intarsia projects. He thanked Darin Liles for designing this walleye that was featured in the August 2008 issue of Creative Woodworks & Crafts, and he also appreciated the help provided by Floyd Hacker of Ocooch Hardwoods in Richland Center, WI in selecting and supplying the woods used.



In Daniel's words, "For anyone who would like to attempt an intarsia project, I would say go for it. Your first project might not be perfect, but you learn so much you can use on the next one."

Your first project looks awfully good, Daniel! We can only imagine how nice your future ones will be!

#### Attention readers:

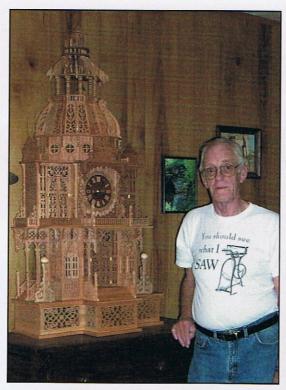
We invite you to send us photos of your work, whether original or not, to be included in our Reader's Gallery feature. If it is not of your own design, please tell us whose design it is and, if possible, add a few sentences about the piece(s) being shown. Please do NOT send the item itself. Also include your mailing address, and feel free to include a photo of yourself!

Digital photographs are acceptable with a resolution of 300 dpi at a minimum of 3" x 4", preferably in jpeg or tiff format. They may be emailed to: editors@woodworksandcrafts.com. Good, clear, flat photos (or slides) are also acceptable, and may be sent to Creative Woodworks & Crafts, 7 Waterloo Road, Stanhope, NJ 07874, Attn: Robert Becker.

Michael Bearden of Manito, IL has been scrolling for about 50 years. He learned woodworking from both his father and grandfather. Michael is shown with The Dome Clock from Wildwood Designs. The York Minster Cathedral Clock, designed by Al Spicer of Greensboro, NC, and carried by Wildwood Designs, is Michael's most recently completed clock.

It measures 42"-tall, 23-1/2"-wide, and 8"-deep, and it is made entirely of red oak. The crosses and finials on top are cut from 3/32"-thick wood, which were made by laminating three pieces of veneer together. The remaining pieces are 1/4"- and 3/16"-thick.

Michael writes that



Michael with Dome Clock

this was possibly the most fun he's had making a clock. With the amount of work that had to go into creating this masterpiece, we're certainly glad to hear you enjoyed it! Thanks for sharing, Michael.



York Minster Cathedral Clock



Henriette Corbeil of La Minerve, Quebec has been doing intarsia for five years. Henriette writes, "When I started, I gradually 'invaded' my husband's garage. After a few weeks into this new passion for wood, I got my husband Jean-Marc interested in the scroll saw (no man can resist new tools!), and since then, we have been doing wood projects together. Most of the time I do the design on my computer, I make the wood selection, and put the pattern on the wood. He does the cutting, and I take over to do the rest up to the finish, where Jean-Marc comes to

the rescue again and does the final varnish spray coats. We can say we complement each other!"

Jean-Marc and Henriette's father built her a workshop of her own, so she now has plenty of room for making her projects. She has been selling pieces mainly to pay for the wood and tools, and to be able to practice her hobby for free.

Henriette sent this photo of "Remembrance," designed by Bruce Worthington. It is made from maple, basswood, red oak, white ash, pau amarillo; and poplar. She says that each time she looks at it, "all kinds of emotions and thoughts come to mind," and that it was very rewarding to make this beautiful pattern by such a talented designer.

G0000

You and your husband sound as though you have a great arrangement, Henriette! We hope you continue to enjoy intarsia and that you'll share more photos with us in the future.

# Lighting the Way: An Intarsia Experience

by Dirk and Karen Boelman

his special lighthouse scene was commissioned by the Wisconsin Lions Foundation for display in the Health Lodge at the Lions Camp in Rosholt, Wisconsin. It measures four feet by five feet, weighs 98 pounds, and has over 250 pieces. Laser-engraved on it are the names of individuals, businesses, and organizations who generously donated to build the Lodge.

This is our story about a project—our very first intarsia piece—that "overwhelmed" us from beginning to end. It started out with, "Yup, sure we can do that!" However, it soon turned into, "Hmmmmmm...how are we going do that?," and we reached, "I am not sure we will ever get this done." Finally, though, the day arrived when we were able to say, "WOW! This is really something!"





Dirk and Karen with Mike Lisle

It began in the fall of 'O7, when we were approached by our friend, Mike Lisle, from the Board of Directors for the Wisconsin Lions Foundation. The Foundation was looking for an artist to create a special piece commemorating the recently constructed Health Lodge. They wanted something with a nautical theme, perhaps a lighthouse, with a plaque that would bear the names of the people who had donated towards construction of the new facility. He told us that the camp was for children with disabilities such as blindness and deafness, kids with diabetes, and kids with mild cognitive disabilities. They wanted the project to be three-dimensional so that visually-impaired kids could touch and feel it.

His story about the camp touched our hearts. As time passed, we spoke with others about this project, and it seemed that almost everyone knew of the camp. Many people were aware of someone who had attended the camp, worked there, or had helped raise funds for it. Over 1,500 children per year participate, and everyone praised how wonderful it was for all the kids and adults who attended. Creating this project for such a special organization was an honor for us, and a fantastic experience.

Here's how we did it ...

continued on page 64

I combined features from a few different lighthouses to design this one, and then developed a scene to surround it. Initially, we were going to incorporate a plaque in the upper right corner, which would be engraved with all of the donors' names. Later, a decision was made to engrave the names directly onto various parts of the pro-

The project's dimensions were established by the Foundation because the finished piece needed to fit within a specific area in the Lodge. We had to figure out how to turn my original 10-1/4" x 13-1/8" drawing into a full-size pattern for the project. We decided to enlarge the drawing on our photocopier, which ended up being a difficult task. Because the maximum our copier will enlarge is 200%, we had to repeatedly enlarge the drawing. Each time, we had to tape the enlarged pages together, figure out what areas of the enlargements would fit on the copier, and then enlarge to the next size. We ended up with sixteen 11" x 17" sheets, all overlapped and taped together to create our final drawing.

If you have worked with photocopiers, you are probably aware of the distortion that occurs during enlarging. After you copy and re-copy, the distortions are exaggerated. Lines don't line up, and nothing is square or true. While we weren't able to use the photocopied drawing as a pattern, we could use it to figure out dimensions and necessary quantities of wood.

Working with colored pencil and a small drawing of the pattern, Dirk was able to determine the colors and species of woods to be used for the various parts.

Wood selection is key to creating a gorgeous intarsia project. We are fortunate to live near Ocooch Hardwoods, owned by Floyd and Carol Hacker, in Richland Center, Wisconsin. Color drawing in hand, we went to visit them, and thanks to their terrific recommendations for wood species, we came up with colors of woods that perfectly matched our needs. We chose yellowheart for the sky, aspen for the lighthouse and ray of light, poplar for the trees and grassy areas, bloodwood for the rooftops, and



Assorted shades of blue pine that were used for the water.

blue pine for the water. White ash, black ash, walnut, oak, cherry, cedar, and hickory were used for the rocks and remaining areas.

My taped-together paper "pattern" was a long way from being an actual pattern that could be used to create a project. The only way to develop a precise full-size pattern was to redraw it. I could not find 4-foot wide paper, so I drew the new pattern in two halves. After locating a copy service that could make copies up to 36" wide, we had a few copies of each half made and taped the halves together to form the full-size pattern.

We had now reached the point where we knew we would have to gain a little more knowledge about intarsia and were starting to question how we were possibly going to do this. We read several articles about intarsia and studied various methods for working with patterns. However, if it weren't for the helpful advice from gifted and talented intarsia artists Kathy Wise and Homer Eshop, we would probably still be standing there scratching our

heads about where to start!

A lot of things during this process were learned the hard way. We decided to start from the top of the design and work our way towards the bottom. I used an artist's knife to carefully cut the first piece from the pattern. Because it had a straight edge along the top, it was fairly easy to position this pattern on the wood. Other long pattern pieces created much more difficulty. We learned that you need to place the patterns perfectly flat onto the wood, without curving or bending them; otherwise, the pieces will not fit together correctly. We also ran into problems with our pattern because we had not taken enough time to carefully tape the entire area where the pattern halves overlapped.



The first piece was 42" long. We quickly learned that it is a long way from the far end of the board to the blade when you are cutting a 42"-long piece of wood on a scroll saw! It's hard to see, hard to hold the wood down next to the blade, and hard to know how far you need to swing the end of the board to get the blade to follow the cutting line. It's even harder when you are trying to saw through 3/4"-thick hard woods like yellowheart and bloodwood. "Hard" work seems to be putting it mildly!

We used 1/2"-thick plywood for a backer. Along the top and left side, I attached two 3/4" x 3" pine boards. With the corners aligned perfectly square, I fastened the boards to the backer using drywall/multipurpose screws. This provided a square corner and two straight edges against which we could fit parts as we cut them. We let the ends of the pieces "run wild" along the right side. They would be trimmed flush later.

When we started cutting the parts, we chose to leave quite a bit of excess wood outside of the pattern lines. We thought it best to leave plenty of excess which we would trim away during fitting, rather than have the parts be too short with wide gaps between them. (Our wood stretcher has never worked very well!)

We later learned that removing all that excess was a real pain! It added lots of extra hours of work and made it more difficult to fit parts together. It wasn't until we were

far into the project that we decided we could saw right along the edge of the pattern line. (After all, we are both fairly good scroll sawyers!) This greatly reduced the amount of sanding needed to fit parts together, and made it much easier for us to continue living with each other!



We placed the plywood backer on a big table. As we cut out parts, we placed them in position on the backer. Because we had left so much excess wood around the pieces, they didn't fit very closely together, and they didn't fit inside openings. We put small parts in a box and set other parts roughly into place. We left the patterns on the parts for reference during fitting.

As we continued cutting, we knew we would definitely need to do a lot of work to fit those pieces together, and I was worrying about how we were going to do that. I was

### History of the Lions Club

With utmost honor and respect, we offer this brief history and description of the Lions Club organization. We encourage everyone to support your local clubs, learn more about them, and consider joining them.

In 1925, Helen Keller asked members of the Lions Club International to become "Knights of the blind in the crusade against darkness." Since that time, Lions have been actively involved in service to those who are blind and visually impaired. Lions Clubs are also committed to providing services for youth, improving the environment, building homes for the disabled, supporting diabetes education, conducting hearing programs, and, through their foundation, providing disaster relief around the world. The call for unselfish service to others is one of the association's main principles. Today there are over 45,000 clubs in 200 countries or geographical areas, with over 1.3 million Lions worldwide.

a charitable, non-profit, Wisconsin corporation in charge of all statewide service and fundraising activities, a highlight of which is the Wisconsin Lions Camp. Located at the camp is the Eyeglass Recycling Center, one of only eleven centers worldwide. It processes over one-million pairs of glasses annually. The eyeglasses are sorted, cleaned, categorized, bagged, and boxed in preparation for shipment to developing countries. For more information please visit: www.lionsclubs.org, www.wisconsinlions.org and www.wlf.info.

wondering how big a job it would be to get the pieces to fit together properly, whether we would have to re-saw a lot of parts, and whether those resawn parts would fit worse than the original ones.

After worrying for a few days, I decided to try fitting a few parts of the sky together. Karen had sawn all of these pieces, and they were extremely difficult to cut. She had to overcome all kinds of obstacles, and there was plenty of grumbling coming out of our shop for several days. All of the sky parts were made from very hard yellowheart, and they were very long! There really isn't room to turn around in our tiny little shop, let alone try to swing a 42"-long board around on the end of a 30" scroll saw. (Needless to say, even though Karen is an otherwise fantastic scrollsawyer, the edges of the sky parts ended up bearing a little resemblance to a corn cob, and they were a real challenge to fit together!)

I took some sandpaper in hand and went to work smoothing out those edges. The problem was that this method would have taken forever. The solution was

to use our Ryobi oscillating sander. Fitted with a big sanding sleeve, the sander worked perfectly on the long, flowing curves. I didn't want to remove a lot of material—I mainly wanted to just smooth off the humps, bumps, and imperfections. With only a minimal amount of sanding, the parts fit together pretty well.

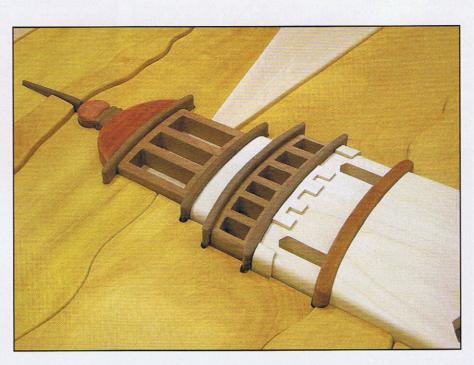
To further improve the fit, I placed adjoining parts together, used a pencil to draw lines on the high sections that kept the parts from fitting together properly, and carefully removed those sections using the sander. I removed a little material at a time, and tested the fit repeatedly until the gaps between the parts were reduced to almost nothing. This process gave us the confidence we needed, and we continued to cut out additional pieces.

By the time we reached the background hills and trees, the deadline pressure was building. We knew we needed to hurry up and get the parts ready for the laser engravers. I used the copier to enlarge the names of donors and their various support levels. We determined the locations for the names, and glued them onto my tapedtogether pattern. Because of the abundance of names, it became necessary to create an additional section of the sky.

With pressure mounting, we continued to cut out parts and began fitting together the additional sky parts, the beam of light, and the lighthouse sections. We started working out thicknesses for spacers in order to make various sections pop out from the background, and started shaping the edges on some of the parts.

We used a Ryobi rotary tool fitted with sanding sleeve bits to round over the edges, and then touched up the pieces by handsanding them. We managed to achieve a good fit for most of the major parts just in time for the engravers to begin their work.





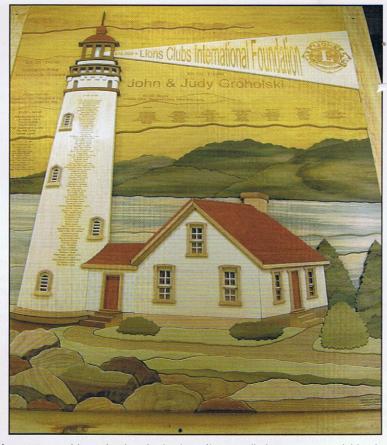
We had provided horizontal guidelines to the engravers to show them where to position the names. While the engraving was being done, we kept our fingers crossed that the parts would come back in good shape, and we continued to work on the windows, doors, steps, foundations, pine trees, and rocks.

Some new challenges presented themselves to us when the engraved parts were returned. As we mentioned, we had intentionally left the pieces along the right side extra long, including the piece for the beam of light. We planned to trim them back at the end to achieve a unified edge. Unfortunately, the engraver had stretched the words and Lions logo in the beam of light piece very close to the edge. Also, the names in the lower right corner section were engraved very close to the edges of the wood. This necessitated some changes to our layout. The bottom right section was moved towards the middle, and a new section had to be created to fill the area. Because the wide end of the beam of light would determine the right side margin for the entire project, we had to adjust the length of the beam. We moved the beam in slightly, so that the shorter sky parts would reach to the correct margin. This required me to remove a little material from the left end of the beam so that it could slide towards the lighthouse. Of course, this affected how all the parts below the beam would fit.

We ended up re-sawing the buildings, steps, windows, doors, pathway, grassy areas, and foundations to make everything fit. At the time this was a real headache, but when it was all done, we could look

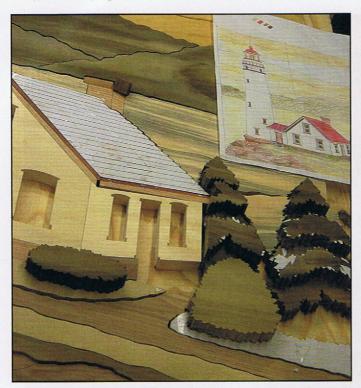
back and agree it was well worth the time and effort.

After working for several weeks on the project with it lying flat on the workspace, I decided to prop up the top end. As I walked around and first saw the lighthouse from this new angle, I remember thinking that we were making something pretty amazing! I asked Karen to come and see it, and we both spent a few minutes really soaking in the full effect of the project. This gave us some renewed enthusiasm, and from that point on, we tilted it up many more times to show everyone who came to visit!

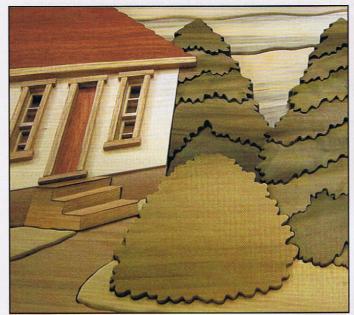




Making the rocks was very enjoyable, and we spent quite a bit of extra time fitting and shaping them. We searched through various species of wood to find just the right colors and wood grain to best represent different rocks. We wanted the rocks to look as if they had washed up on the shore and been deposited there, so we were very careful when placing our patterns on the wood in order to select the best direction for the wood grain.



We struggled a bit to get the pine tree sections to fit correctly, and we had to re-saw a few pieces. Originally, we were going to cut each pine tree from one solid piece of wood. However, after further consideration, I thought it would be interesting to divide the trees into "zig-zaggy" sections, and Karen suggested making them look like the top of each lower section goes under the bottom of the upper section. Eventually, we ended up with some really "cool" looking pine trees, even if we do say so ourselves!



It's hard to believe that these amazing colors and grain characteristics were found in plain old poplar.



Most of the shaping on the pine tree sections was done using a *Ryobi* rotary tool fitted with assorted sanding bits. Next, the pieces were hand-sanded, then smoothed using the rotary tool fitted with soft polishing wheels. To polish all the surfaces to glass-like smoothness, we used assorted electric sanders with fine-grit sandpaper. Eventually, all of the parts were shaped, sanded, and temporarily fitted together on the backer board.



Because of the problems in the lower right section, that corner did not work out to be perfectly square. I attached two more 3/4" x 3" pine boards along the right side and bottom to frame in the parts. I had to adjust the positions of both boards on the bottom right corner in order to make everything fit correctly. It was then time to start figuring out how to construct the frame. Because of the problems with the lower right corner, I thought it would be difficult to miter the corners. I chose to incorporate corner blocks, instead. This design looked great, and it was easy to fit at all the corners. I considered leaving the pine boards around the edge and incorporating them into the frame, but their edges would have shown. I replaced them with solid red oak boards. I also cut oak strips to cover the outer edges of the plywood and extend 1/2" behind the backside. This added depth to the project and helped conceal the hangers that we used to mount the project to the wall. I attached the inner frame parts to the backer using wood screws and glue, and attached the outer pieces using only glue.

We applied lots of clamps, and let it set until dry.

Gluing all of the parts into place was a tedious task. Working from top to bottom, we glued each piece and any necessary spacers into position. The process involved applying glue to the backs and adjoining edges of the pieces, pressing them into place, separating them for several seconds to allow the glue to tack up, applying additional glue to areas where glue had been absorbed, and pressing them back into place. After gluing a few pieces together, we covered them with clean, soft rags and set heavy objects on top to hold them in place for several minutes, or until we felt that the glue had set up. We used four 8-oz. bottles of Franklin



Titebond molding and trim glue to assemble our project.

We had planned to use *Watco* oil on this project because it really brings out the natural colors of the wood. However, it has a tendency to make white woods look a little yellowish, and we wanted the lighthouse and beam of light to remain as white as possible. After experimenting with a few other finishes, we decided that *Minwax* fast-drying polyurethane would work best for our purposes. We started out by spraying on a thin coat of clear satin finish, but it really didn't produce the look we had hoped for. We switched to a semi-gloss version, and applied four coats of it, sanding lightly between applications to smooth it out. We then gave the final coat a good rub down using pieces of a brown paper bag. This produced a gorgeous sheen that begged to be touched!

Lastly, we devised a method to hang the heavy project on four 3/4" x 3-1/2" x 40" red oak boards. One edge of each board was sawn at a 45° bevel. Using glue and screws, we attached one board to the back of the project near the top and one near the bottom, with the beveled edges pointing down. The other two boards were screwed to the studs in the wall, with beveled edges pointing up. Mating the opposing beveled edges holds the project securely and safely

against the wall.

We installed the project in the Health Lodge on September 5, 2008. It had been a remarkable project from beginning to end, and it touched our hearts in many ways. Working on it opened our eyes to a much greater appreciation for the art of intarsia, and gave us a better understanding and great appreciation for the Lions Club organization. We hope you have enjoyed reading our story; hopefully it will be helpful to you in tackling intarsia projects of your own. We also hope it will encourage you to support the efforts of your local Lions Club members. Next time you see them in their yellow vests, take a minute to say thanks for all they do to serve others!

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

### **Wisconsin Lions Camp**

The Wisconsin Lions Camp was established in 1956. It consists of 440 acres, with a 45-acre private lake, many trails, numerous cabins, a lodge for large groups, the health lodge, recreation center, dining hall, and more.

A summer camp program is reserved for children who are blind and visually impaired, deaf and hard-of-hearing, have Type I and Type II Diabetes, or have mild cognitive disabilities. Separate sessions are set up to group children with like disabilities. This makes the sessions more comfortable for children, and enables the camp to offer programs that best meet the needs and interests of the special campers being served.

An amazing staff serves, teaches, guides, and nurtures each camper. Typical activities include swimming, canoeing, sailing, paddle boating, inner tubing, kayaking, rowing, fishing, archery, crafts, nature programs, sports and games, overnight camping and cookouts, canoe trips, hiking trips, challenge courses and much more! All program activities are targeted to the child's abilities and are paced accordingly to provide each camper with a memorable experience.

While safety and proper instruction are an important part of all camp activities, fun and enjoyment are the key elements that run throughout the total camp program. The program provides opportunities for children to grow in their interests, live and interact successfully with others, and foster self-confidence and independence.

The Wisconsin Lions Camp also provides outdoor recreational opportunities for adults with visual or hearing disabilities, and offers two types of family camps: one for families who have a member who is deaf/hard-of-hearing, or blind/visually impaired; and one for members who are mild cognitively disabled or physically disabled.

In addition, the Lions Camp provides retreat and conference services for schools, non-profit organizations, businesses, and other groups. The camp assists groups in meeting their needs by offering a wide variety of services for educational events, recreational activities, training, teambuilding, environmental education, and much more.

All revenue generated by the Retreat and Conference Center Programs is used to fund the summer camp programs, which are offered at no cost to Wisconsin youth and adults with disabilities.



### **Butterfly Pair**

by Annja Starrett



### Introduction

These colorful butterflies are not as demanding as other traditional intarsia projects because there is very little shaping involved. While they can be cut from 1/4"-thick wood, feel free to cut the pieces from 3/4"-thick stock, and then carefully cut them in half using a band saw equipped with a fence. (I do not recommend resawing the pieces using a scroll saw; it would be a very time-consuming and tedious process.)

Many species of wood can be used to create the butterflies; the lead photos show two variations, but many more are possible. Be creative with your wood selection!

### **SUPPLIES**

Wood\*: 1/4"- to 3/4"-thick pieces of walnut, yellowheart, purpleheart, cherry, and mahogany; plywood—one piece 1/8" x 7-1/2" x 7-1/2" (for backer)
Tools: scroll saw with No. 5 or No. 7 blades; band saw (optional); rotary tool (optional)
Temporary-bond spray adhesive or glue stick
Sandpaper, assorted grits

Clear packing tape

Wood glue

Ebonizing solution, wood dye, and/or wood stain (optional)
Black permanent marker
Finish of choice

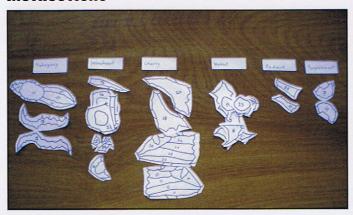
\*Note: The specific amount of wood for each species is not listed because it will depend upon the grain configuration.

Please refer to all manufacturer's labels for proper product usage.

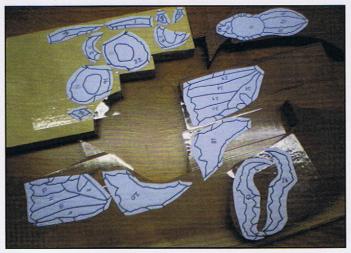


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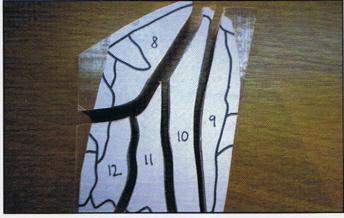
### INSTRUCTIONS



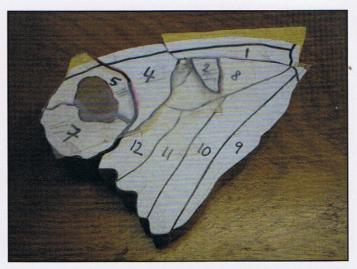
**Step 1.** Make at least five photocopies of the pattern, saving the original for future use. Cut out the body of the butterfly as one piece. Also cut the main portion of the upper left wing (pieces 8, 9, 10, 11, and 12) as one piece, and the main portion of the upper right wing (pieces 27, 28, 29, 30, and 38) as one piece. All other pattern pieces should be cut apart.



**Step 2.** Apply clear packing tape to the surface of the wood. Paying attention to grain direction, attach the pattern pieces to the appropriate pieces of wood using temporary-bond spray adhesive or a glue stick.



**Step 3.** Cut apart the pieces of the upper left wing (pieces 8, 9, 10, 11, and 12).



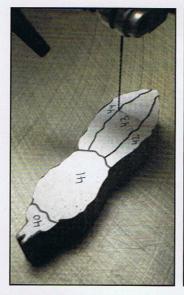
**Step 4.** Fit the remaining pieces of the upper wing to the main portion. Using clear cellophane tape, securely tape the pieces together on the front and back side.

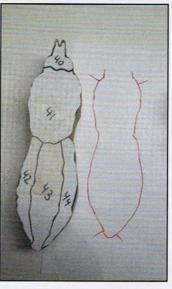


 $\mbox{\bf Step 5.}$  Cut the middle and lower portions of the wing, and fit the three sections together.



**Step 6.** Repeat the process to cut and fit the three sections of the right wing.





**Step 7.** Cut apart the pieces of the butterfly's body. Place the body section onto paper. Trace the outline of the body where it will connect to the wings.



**Step 8.** Using these more accurate cut lines, cut the edges of the wings to fit the body.



**Step 9.** If 3/4"-thick material was used, very carefully resaw the butterfly in half using a band saw equipped with a fence. (I recommend using push sticks for this step.)



**Step 10.** Round over the edges of the body using a rotary tool or your method of choice.

**Step 11.** Elevate the body above the wings by placing it upon a 1/16"-thick spacer and/or slightly shaping the wings down towards the body. Shape the middle portion of the wings down towards the upper portion; alternatively, the upper portions can be placed on spacers.

**Step 12.** Sand all the pieces using 80-grit sandpaper, and finish sand using 150-grit. If desired, certain areas of the butterfly can be enhanced by coloring the wood. I used ebonizing solution to darken the walnut, and red stain to accent the cherry wood.

**Step 13.** Edge glue the pieces together, and let dry. Place the butterfly on the 1/8"-thick plywood, and trace the perimeter of the butterfly. Cutting within 1/8" of the traced line, cut out the backer. Use a black marker to color the edge of the plywood. Glue the backer to the butterfly. When dry, apply your finish of choice.

For questions concerning this project, please email Annja at: annjasholzart@gmail.com.





Background image supplied by @istockphoto.com/Giorgio Fochesato.

### SUPPLIES

Wood\*: 3/4"-thick pieces of: aspen (for water and eye), blue pine (in two shades for fish and one shade for water), buckeye burl (for dark gray sections on fish), ebony (for eye), katalox (for fish back), shedua (for fish back and fins), white maple (for stripes); Baltic birch plywood—one piece 1/8" x 15" x 16"

birch plywood—one piece 1/8" x 15" x 16"

Tools: scroll saw with No. 5 and No. 7 blades, or blades of choice; drill with small bit (to drill blade entry hole for eye); belt sander; oscillating spindle sander; inflatable drum sander; detail sander; rotary tool with assorted attachments; assorted clamps

Temporary-bond spray adhesive

Clear packing tape

Fine-grit sandpaper

Wood glue

Black permanent-ink marker

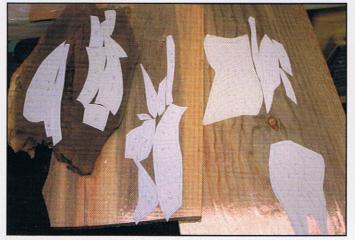
Wipe-on urethane finish, or finish of choice

\*Amounts of wood required will depend upon grain configuration. In response to many questions about obtaining some of the woods used in these projects, there is now a Wood Sources link on Bruce's homepage at www.intarsia.net. The listing includes phone numbers for wood supply companies, plus links to their websites.

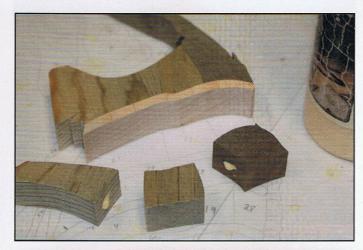
Please refer to all manufacturer's labels for proper product usage.

### INSTRUCTIONS

Cutting



**Step 1.** Make several photocopies of the pattern, saving the original for future use. Cut the sections of the pattern apart, and position them on the appropriate pieces of wood, paying careful attention to grain direction. Place a layer of clear packing tape on the sections of wood to be used for the project. Using temporary-bond spray adhesive, attach the patterns to the taped surfaces of the wood. (The clear tape allows you to see the wood grain while positioning the pattern pieces and it allows for easier pattern removal.)





**Step 2.** This project has many long, somewhat thin pieces that form the stripes. You may want to spot glue these pieces as you cut them and build the main body; otherwise, they may tend to curl and throw off the final fit.



**Step 3.** To help achieve a more three-dimensional appearance, the marlin should be glued into sections. Each section will then be shaped as one piece. The main portion of the body forms one of the larger sections, and the head of the fish (with the sword attached) forms another.

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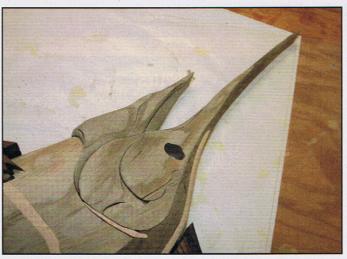
**Step 4.** Check for the fit of the pieces after they have all been cut and glued up into sections.







**Step 5.** Taper down the portions of the body where they meet the water. Also taper down the lower parts of the belly.



**Step 6.** Lower the areas around the gills and mouth to set them apart from the rest of the head area.



**Step 7.** The fins on top of the marlin should be thinner than the body, allowing the body to taper into them.



**Step 8.** The fins on the lower section of the marlin should be thicker than the body. These fins should taper into the body, rather than the body tapering into them, as with the upper fins.



**Step 9.** Because the water needs to look rough and appear to be falling away from the fish, there should be somewhat sharper edges to the pieces of water directly in front of the marlin. The portions of water that are further away from the fish should be more rounded and smooth.

**Step 10.** Finish shaping the pieces until you are satisfied with the overall appearance. Edge glue the sections together, and let the glue dry completely.

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**Step 11.** Using a sponge brush, apply wipe-on finish to the marlin. Wipe off excess finish using a soft cloth. Use an air compressor, a dental tool, or a sharpened dowel with a soft cloth to clean out any excess finish from between pieces of wood.

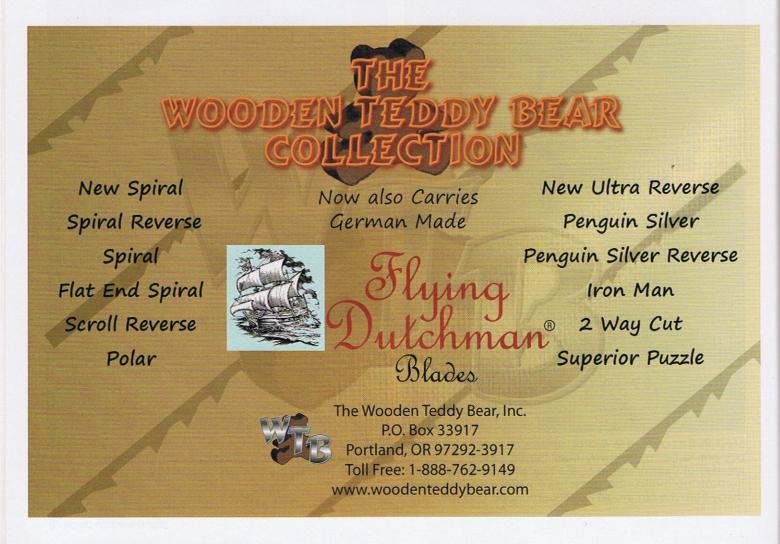
**Step 12.** Place the marlin on the Baltic birch plywood, positioning it so the grain of the plywood runs in the same direction as the grain of the sword on the marlin. (The sword area is a very fragile part of the project; having the grain of the backer running in the same direction will give this area more strength, making it less likely to break off.) Trace the outline of the marlin onto the plywood using a pencil. Alternatively, place carbon paper beneath the marlin, and trace the lines using a pointed tool.

**Step 13.** Cutting just to the inside of the traced line, cut out the backer. Color the edges of the backer using a black marker. This will help the edges blend into the finished project. Securely glue the backer to the marlin, and let dry. If you plan to sell your marlin, consider listing the woods used in the project on the backer, and don't forget to sign it!

To contact Bruce, email him at brucew@intarsia.net, or visit his website at www.intarsia.net. To contact Janette, email her at issue as a contact sangle at your says

isquare@square-designs.com, or visit her website at www.square-designs.com.





### A Sneak Peek from our June Issue on sale March 31st!



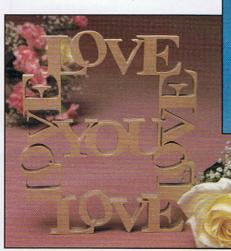
Alphabet Blocks by Paul Boer



by Dan and Ray Wilckens

**Berry Basket** 

by Wayne Bosler



Love All Around You by Toni Burghout



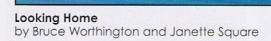
Jackalope by Wayne and Jacob Fowler



Flamingo Clock by Billie Holm



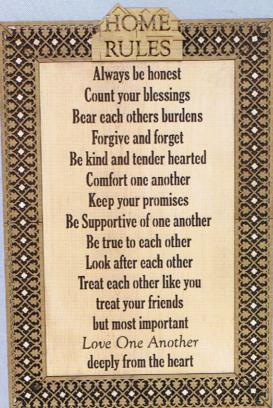
Harpy Eagle by Jake Klipple



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**DESIGNS** 



# FULL SIZE PATTERN SECTION NO. 1 APRIL 2009

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## Metric Conversions:

1 inch = 25.4mm = 2.54cm = 0.0254m

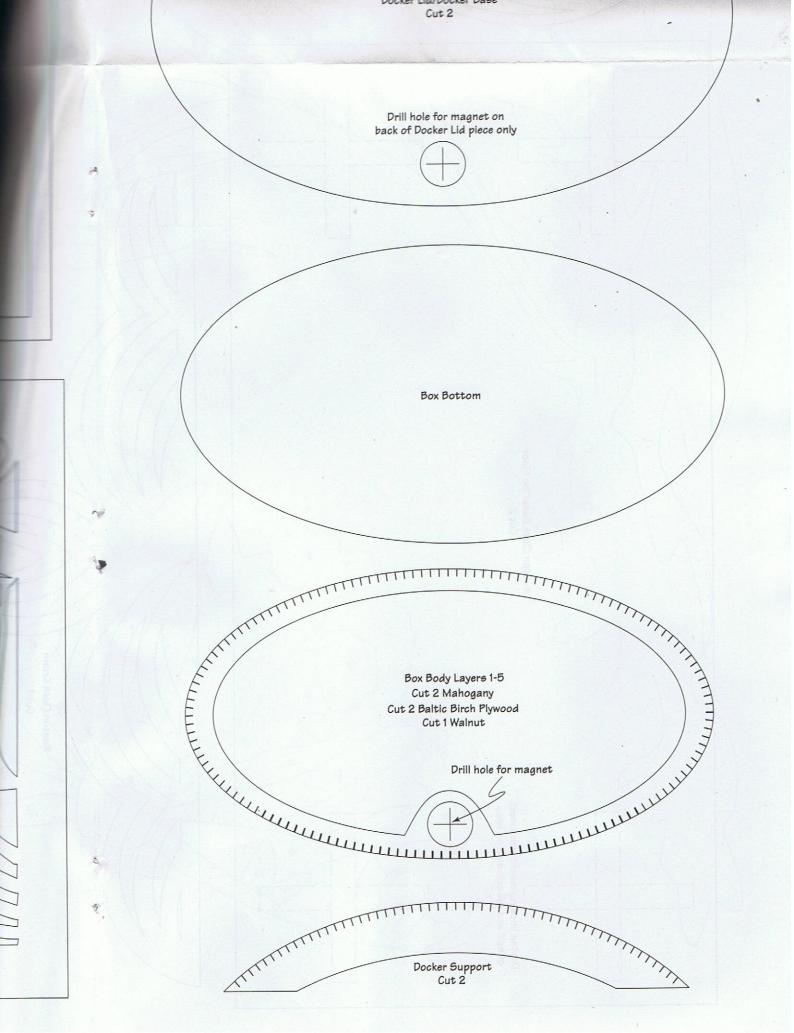
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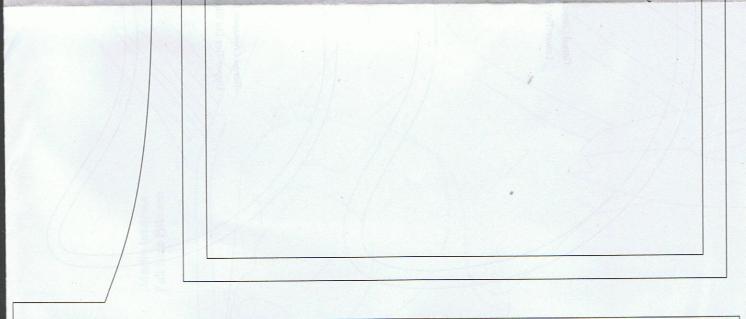
1/16" = 1.59mm 5" = 12.70cm 6" = 15.24cm 1/8" = 3.18mm 1/4" = 6.35mm 7" = 17.78cm 3/8" = 9.53mm 8" = 20.32cm1/2" = 1.27cm 9" = 22.86cm 10" = 25.40cm 5/8" = 1.59cm 3/4" = 1.91cm 11" = 27.94cm 12" = 30.48cm 7/8" = 2.22cm24" = 60.96cm 1" = 2.54cm 36" = 91.44cm 2" = 5.08cm 3" = 7.62cm 45" = 1.14m 60" = 1.52m 4" = 10.16cm

Anika Art Box Full Size Patterns

Dotted line indicates placement of Docker Support

Docker Lid/Docker Base Cut 2

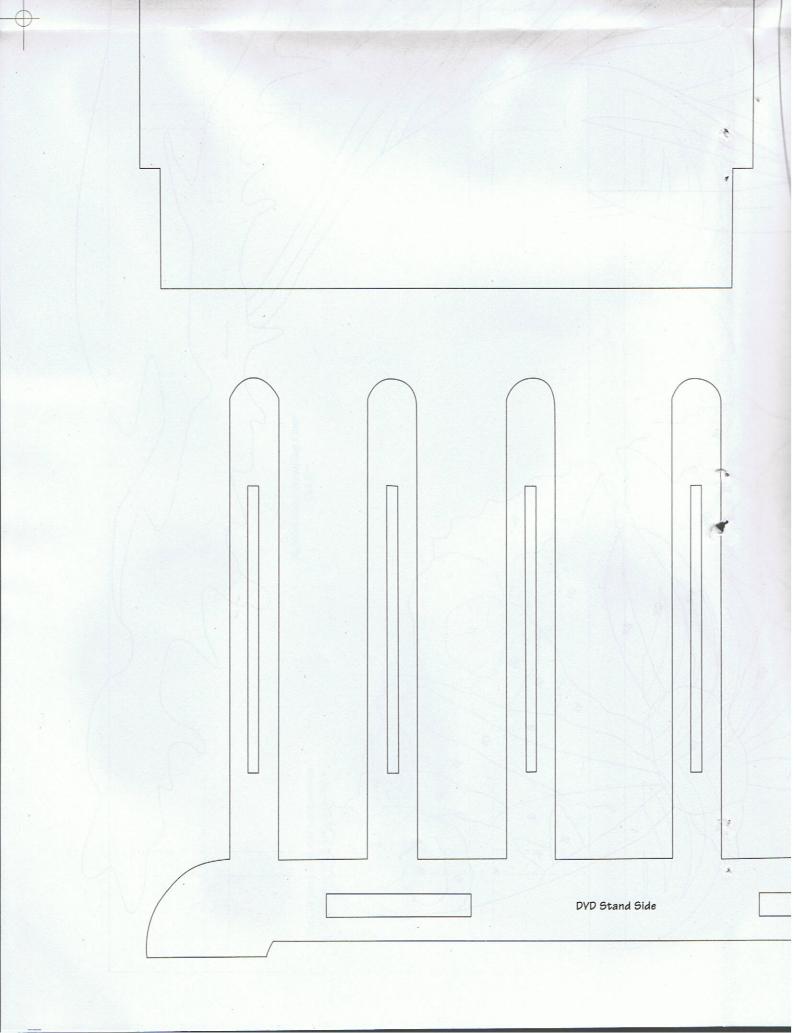


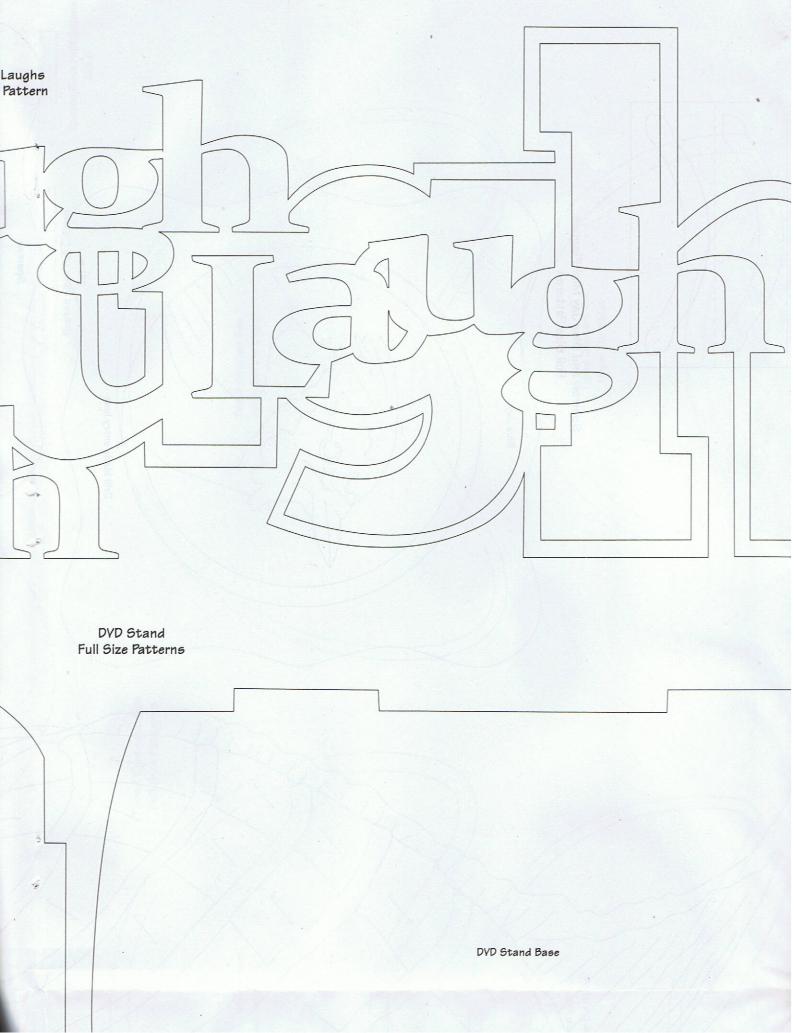


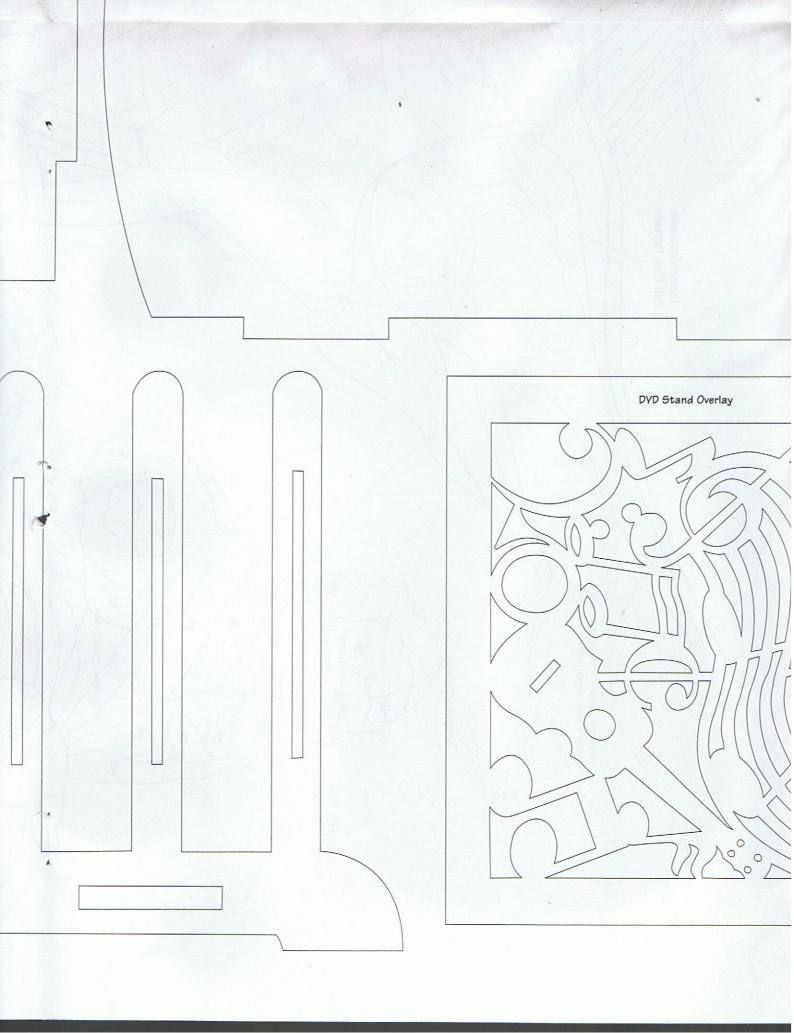


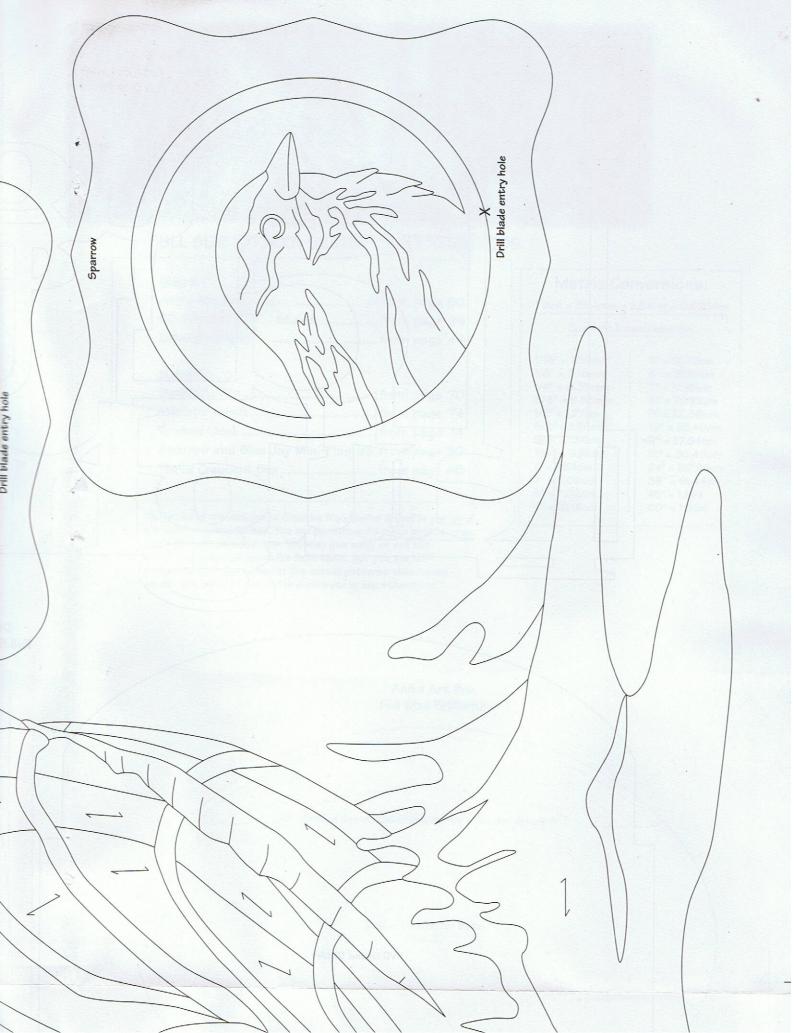


Lots of Laughs Full Size Pattern Fu DVD Stand Divider

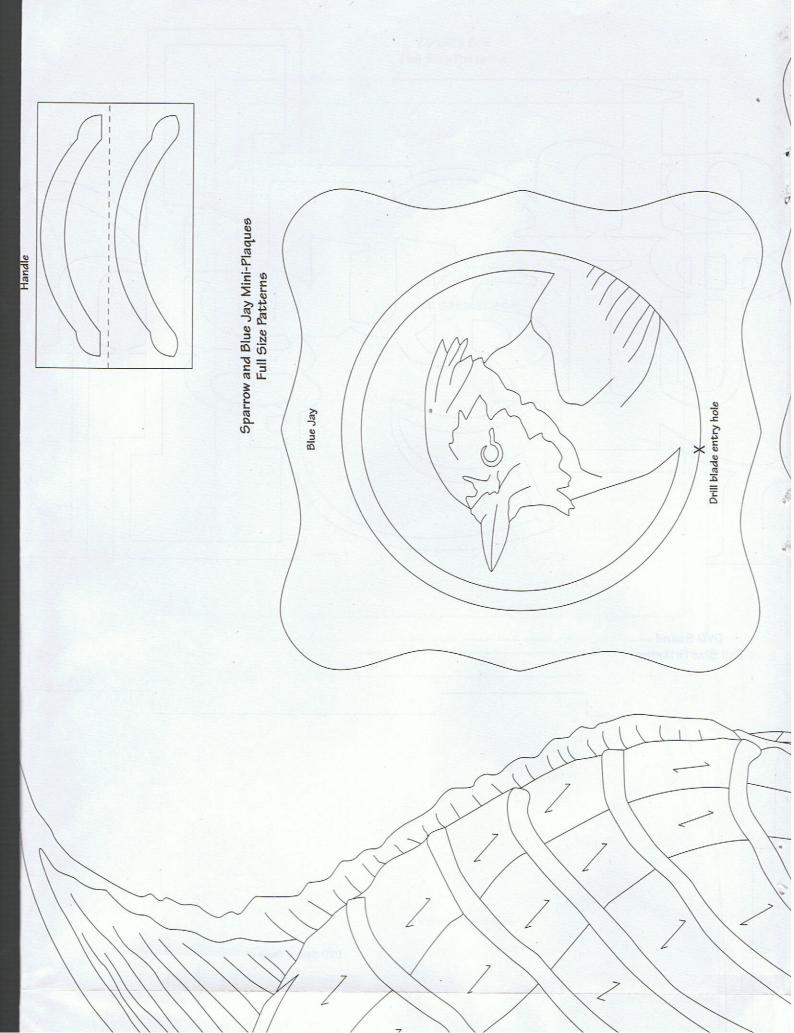


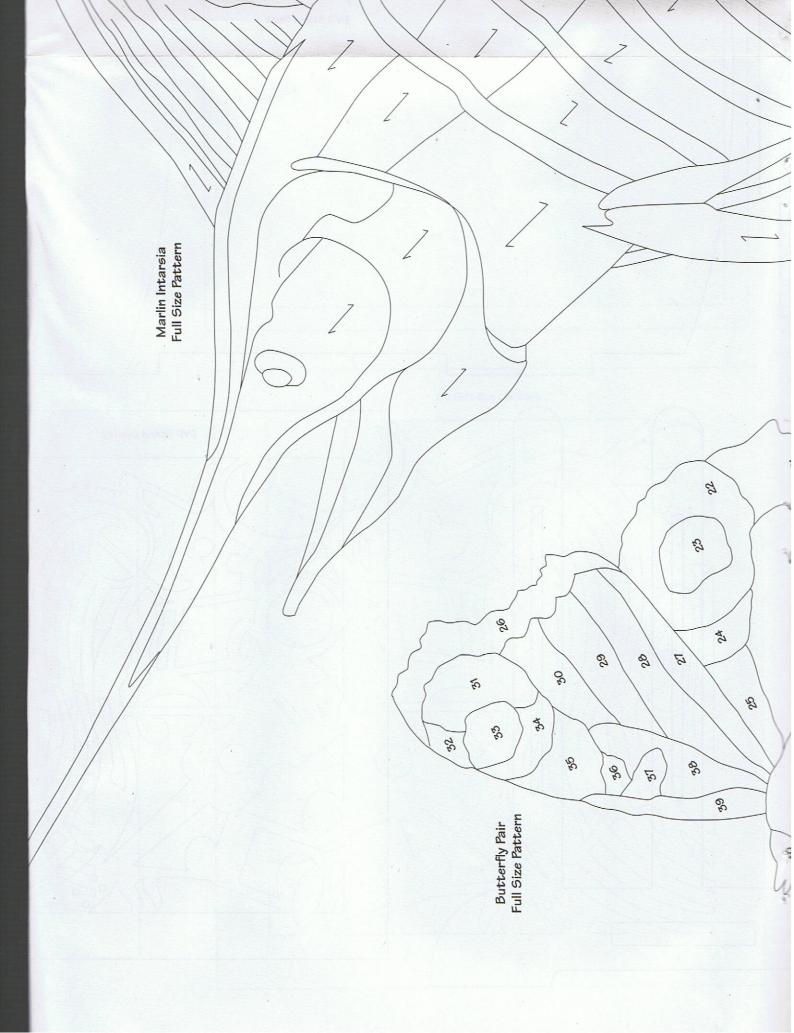


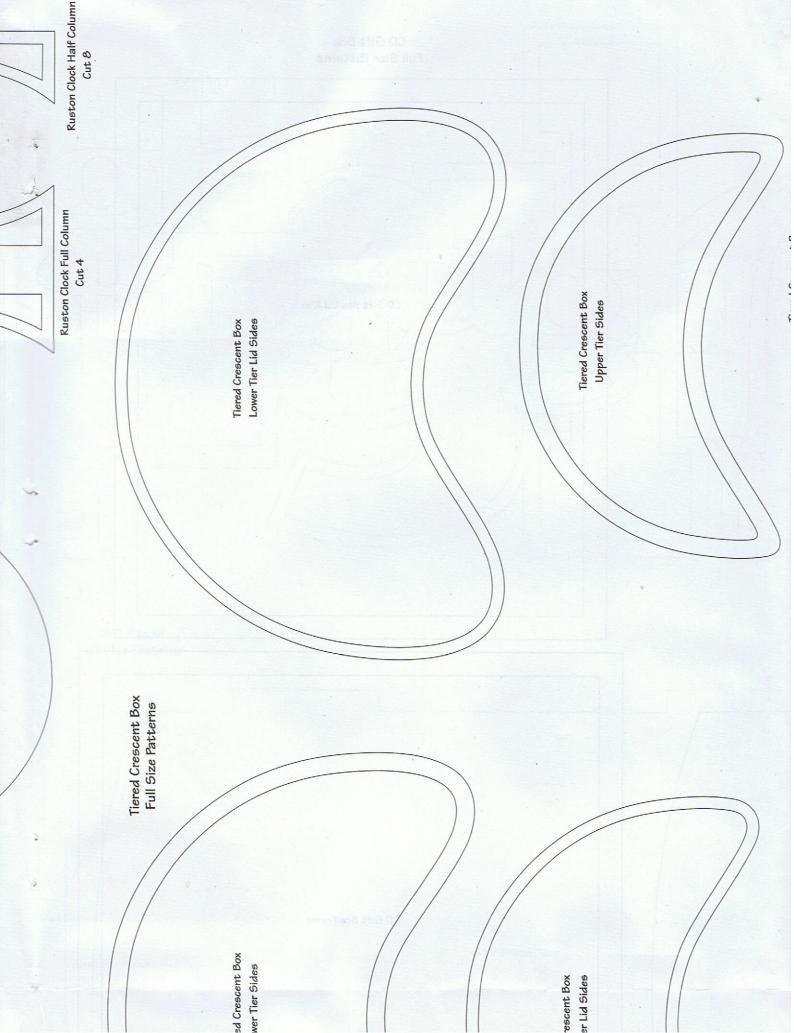


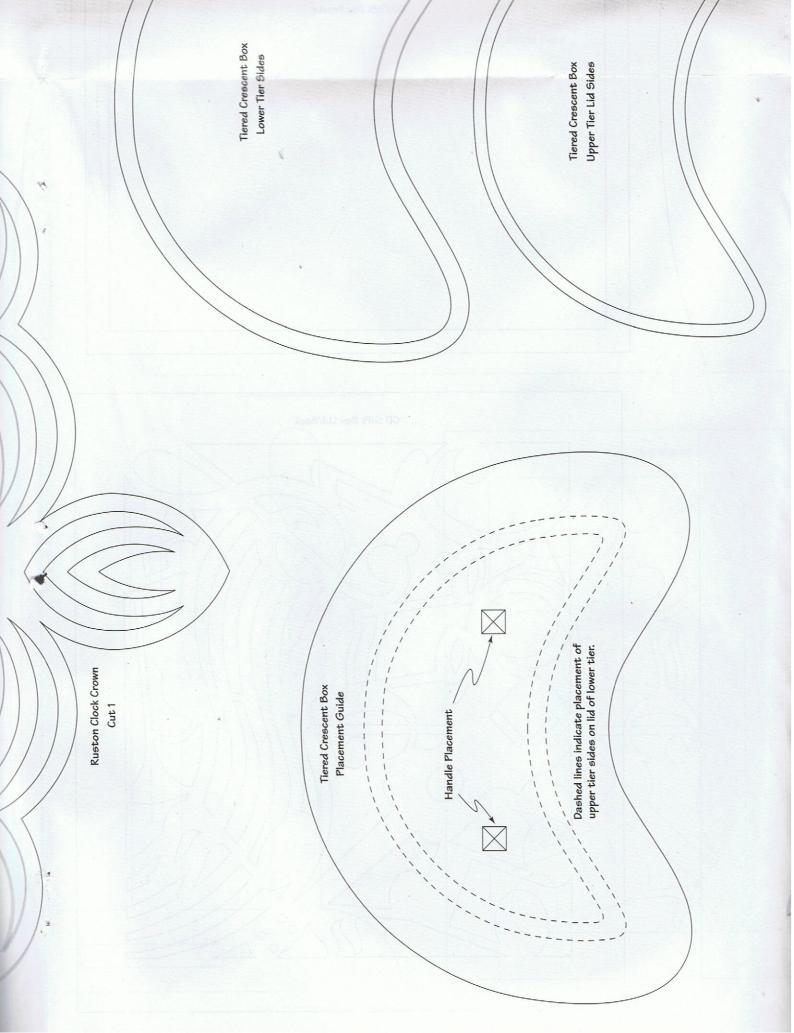


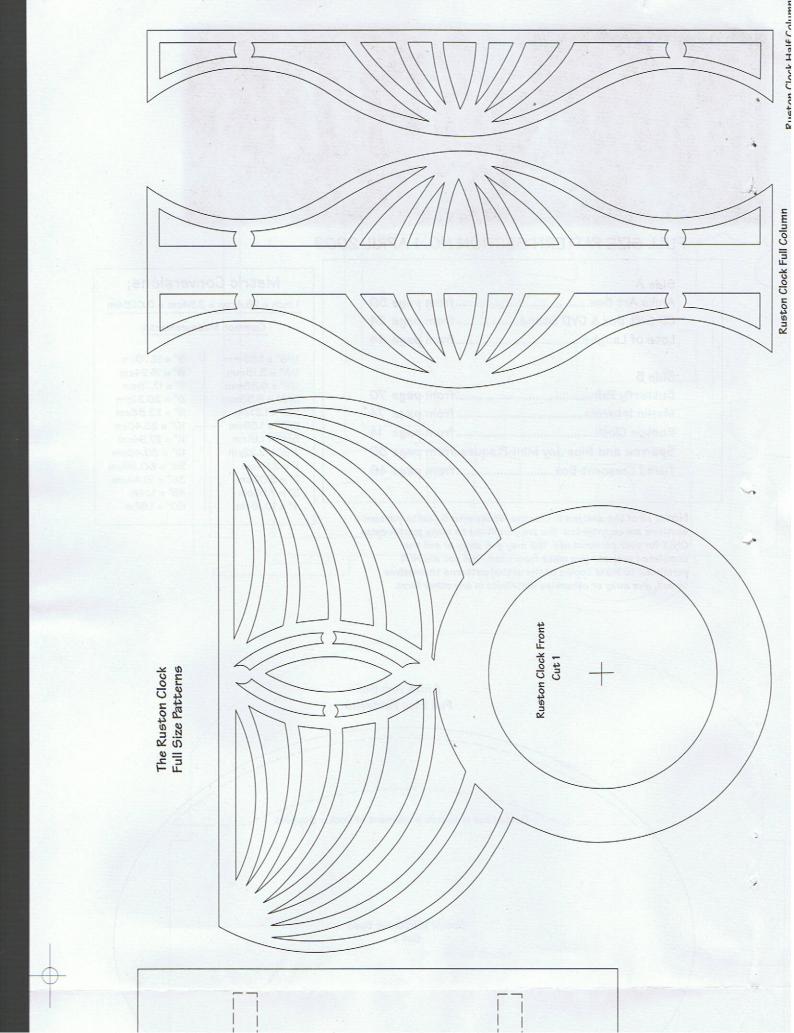


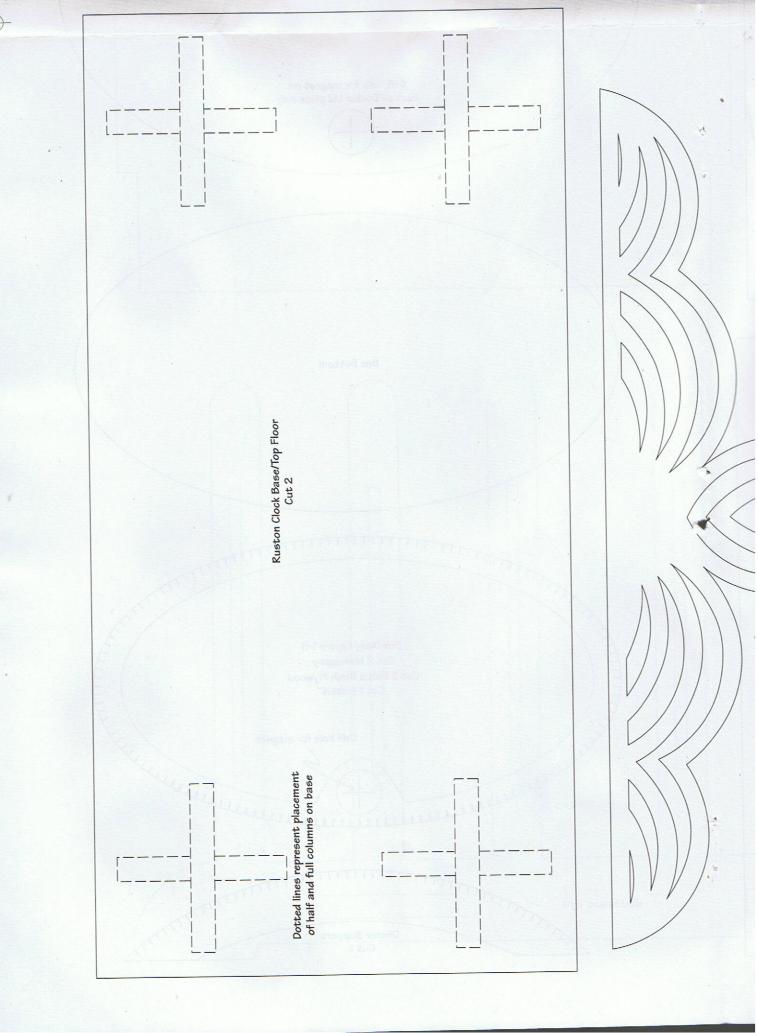














# FULL SIZE PATTERN SECTION NO. 2 APRIL 2009

### Side A

Antique Bow Saw Reproduction......from page 18 Arch Fret Clock.....from page 54 Rainbow Trout.....from page 10 Startled Mallard Mini Clock ......from page 22 Walnut Inlay Jewelry Box.....from page 36

### Side B

Gone to the Dogs.....from page 6 Hummingbird.....from page 42

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4" = 10.16cm

Mallard Clock Upright

Mini Clock erns

