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Premium Plan

In this plan you'll find:

- Step-by-step construction instruction.
- A complete bill of materials.
- Construction drawings and related photos.
- Tips to help you complete the project and become a better woodworker.

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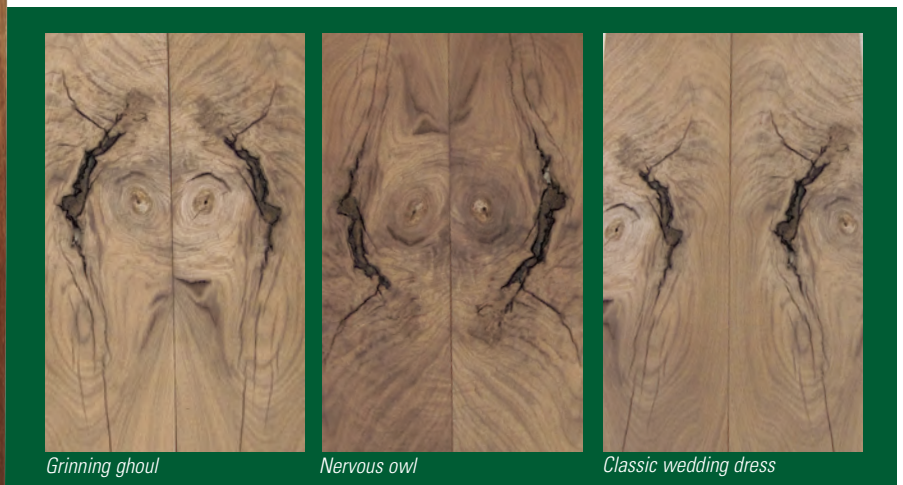
Wall-hung Jewelry Cabinet



Gnarly Wall-Hung Jewelry Cabinet

By David Munkittrick

I have a hoarding problem. I routinely hang on to wood most cabinet shops toss in the scrap bin — especially if it has some really cool figure.

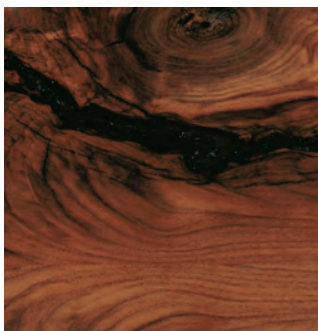


Grinning ghoul

Nervous owl

Classic wedding dress

The book-matching process sometimes reveals pretty startlingly bad calls, especially if your project is a jewelry box. The choices (above) left little doubt as to the best path.



To “salvage” prize stock, the author uses CA glue to first stabilize bark inclusions, knots or punky areas that are prone to tearout. He follows up by filling other voids and cracks with a slow set, two-part epoxy colored with a powder dye designed for solvents (for more on this technique, see page 70). He also adds fairing filler to give the epoxy a thicker consistency and makes it easier to sand.



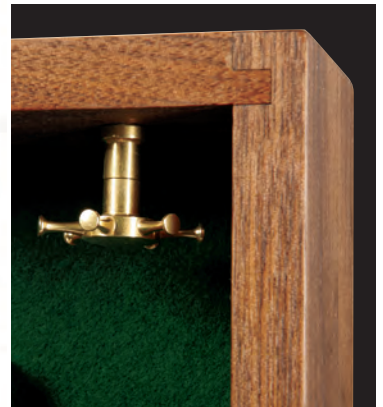
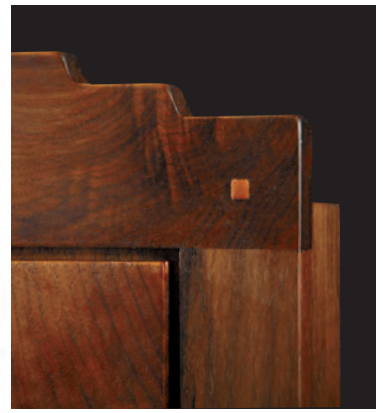
I can justify my “collection” of hoarded leftovers because I’ve found that with a little extra work, my lowly scrap wood can be transformed into some pretty cool projects.

When a friend approached me to build a hanging jewelry box he designed for his wife, I knew just where to find the wood. Three offcuts of 8/4 walnut with knots, splits, cracks and some stunning figure were perfect for this jewelry box. The 8/4 stock would require resawing, and the gaping holes around the bark inclusions would need to be filled with an epoxy, but I knew the end result would be worth the extra effort.

Come along and I’ll show you how I use gnarly stock in my projects. In this story I’ll talk about how I resaw thick stock, fill cracks and voids with dyed epoxy, mount butt hinges and add the end grain pegs for a little Greene & Greene flair.

Let’s Get Started

If your wood is in the rough, joint and plane your stock first. Then take a close look at the wood and mark out your cuts (see top left photo, page 4). You have to practice a little triage with wood casualties like these. I use chalk to plan my cuts. If I change my mind, the chalk is easy to erase. Reserve the most spectacular grain for the door panel. Straight-grain sections are best for door frames where you want maximum stability. Take



your time choosing the material and planning your strategy; this is an important step.

Now prepare your stock for resawing. For this project, I planned to resaw my 1 3/4" material in half. This would give me plenty of room to joint and plane the stock to a final 3/4" thickness. Set a marking gauge to approximately half the thickness of the stock and mark the cutline. Often, I will also run the gauge on the opposite face of the board. This usually produces two closely spaced lines down the middle of the board to form a perfect little "road" for my band saw blade to travel along.

With wide stock such as this, I use a simple single-point fence for resawing (see bottom photo, page 4). Whatever you do, don't just walk up to your band saw and have at it. Take the

time to set your saw up for the operation at hand. Start with the right blade. I always keep a sharp, 3- to 4-tooth per inch skip tooth resaw blade for cuts like this. Mount the new blade, set the guides carefully, then make sure your table is perpendicular to the blade. Clamp down the fence using your marked wood as a guide. Now, go ahead and make your cuts.

After resawing, I always give the wood a rest. Every board has some built-in stress. We've all experienced this on the table saw when the offcut bends away from the board as it's cut loose. Set the freshly resawn boards on scrap stickers, giving the wood a day or two to move before you joint and plane it to final thickness. This is an important step that allows the newly liberated wood to distort before you proceed.



Plan your cuts with chalk, reserving the best figure for the door panel (top). Scribe a centerline down the edge of the board with a marking gauge to use as a guide for resawing (right). Close, double lines are even better.



Resaw thick stock with a single-point fence. The beauty of this fence is that it allows you to swing the wood to account for blade drift and still keep your blade tracking right down the middle. Have a push stick within easy reach to safely finish your cut.

Dealing with Defects

The board I planned to use for the door panel had some bark inclusions. I dug out any loose bark, then stabilized the remaining bark with CA glue (see bottom photos, page 2). Stabilized wood is less prone to tearout or fuzzing when milled.

Once the wood was shored up, I jointed and planed it flat and square (see photo, below). Even though my panel stock would eventually be 5/8", I surfaced it to 3/4" because it still had to be book-matched and glued up into a single panel before surfacing to the final thickness.

Now it was time for some fun. I always love this part: playing around with book-matched panels in search of the perfect combination. This time it was something of a "no-brainer" (see photos, opening page). Once I had my book-match figured out, I could glue and clamp the panel together. When the glue dried, it was time to deal with those bark inclusions as well as some cracks and splits in the wood. Epoxy does wonders in cases like this — it fills and stabilizes the voids and cracks. Dyed black, the epoxy actually dresses up the panel's appearance, giving it a more elegant and less rugged look.

Mix the dye and filler with the epoxy in a sufficient amount, and use a stiff brush to push it down into cracks and crevices. Let the epoxy set overnight, then sand and plane the panel to final thickness.



Joint and plane your stock square and flat before gluing up the book-matched panel. Surface the panel to final thickness last.

Jewelry Cabinet Hard-to-Find Hardware

The following supplies are available from Woodworker's Journal.

Antique Brass Knob 1 1/4" (1) #20027

Pressure Sensitive Felt (5 sheets req.) #22814

Miniature Shaker Pegs (1) #21964

Brass Shelf Supports (1) #30692

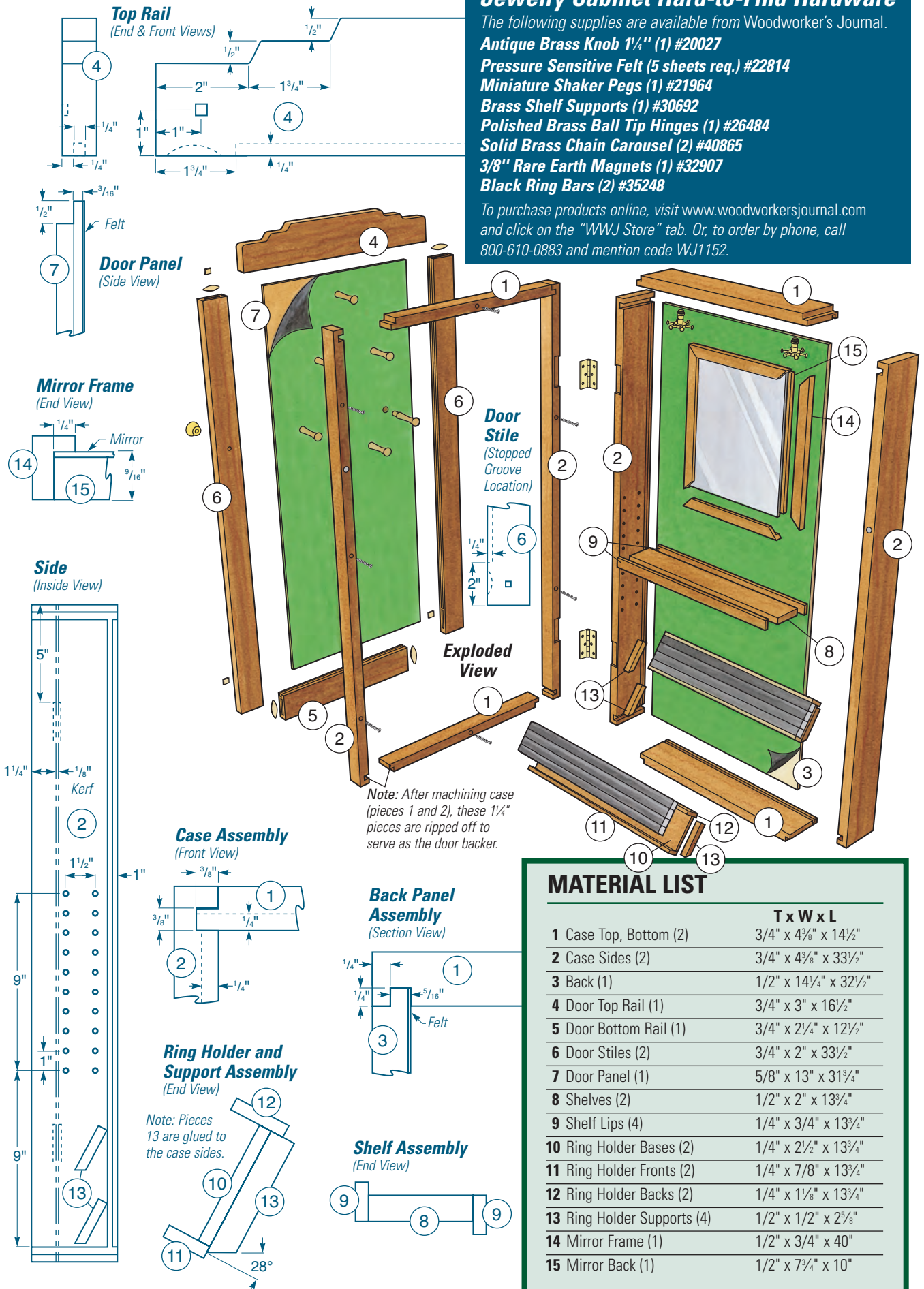
Polished Brass Ball Tip Hinges (1) #26484

Solid Brass Chain Carousel (2) #40865

3/8" Rare Earth Magnets (1) #32907

Black Ring Bars (2) #35248

To purchase products online, visit www.woodworkersjournal.com and click on the "WWWJ Store" tab. Or, to order by phone, call 800-610-0883 and mention code WJ1152.



MATERIAL LIST

| | T x W x L |
|-----------------------------|--------------------------|
| 1 Case Top, Bottom (2) | 3/4" x 4 3/8" x 14 1/2" |
| 2 Case Sides (2) | 3/4" x 4 3/8" x 33 1/2" |
| 3 Back (1) | 1/2" x 14 1/4" x 32 1/2" |
| 4 Door Top Rail (1) | 3/4" x 3" x 16 1/2" |
| 5 Door Bottom Rail (1) | 3/4" x 2 1/4" x 12 1/2" |
| 6 Door Stiles (2) | 3/4" x 2" x 33 1/2" |
| 7 Door Panel (1) | 5/8" x 13" x 31 3/4" |
| 8 Shelves (2) | 1/2" x 2" x 13 3/4" |
| 9 Shelf Lips (4) | 1/4" x 3/4" x 13 3/4" |
| 10 Ring Holder Bases (2) | 1/4" x 2 1/2" x 13 3/4" |
| 11 Ring Holder Fronts (2) | 1/4" x 7/8" x 13 3/4" |
| 12 Ring Holder Backs (2) | 1/4" x 1 1/8" x 13 3/4" |
| 13 Ring Holder Supports (4) | 1/2" x 1 1/2" x 2 5/8" |
| 14 Mirror Frame (1) | 1/2" x 3/4" x 40" |
| 15 Mirror Back (1) | 1/2" x 7 3/4" x 10" |



After applying self-stick felt sheeting to the back panel, use a straight edge and a utility razor to trim it evenly. Apply finish to the inside faces of the case parts before assembling them with glue. Take care to keep glue squeeze-out away from the felt lined back.

Assembling the Case, Door Frame

With the door panel behind me, I cut my case parts to size and machined tongue-and-rabbit joints on the router table to attach the top and bottom to the sides. Take your parts to the table saw and rip 1/4" strips off of their front edges to use for the door assembly later on. Mark the parts accordingly to keep their orientation and grain direction clear. Follow the *Drawings* to bore shelf-pin holes in the case sides and door frame.

My cabinet's rabbeted back panel is made of 1/2" plywood, covered with felt. This explains why the case groove width (see drawing) is slightly oversized.

Apply self-stick felt to the panel's "show" face. I decided to pre-finish the insides of the cabinet box before assembling it with glue (see photo above). Trying to apply finish right up to the felt is a chore to avoid. Glue the back panel securely into the grooves in the case pieces so you can drive screws through it

“Pre-finish the inside of the cabinet box before assembly. Trying to apply finish right up to the felt is a chore to avoid.”

later to hang the cabinet from a stud.

Next, glue up those 1/4" strips (from pieces 1 and 2) to create the rear framework for the door. Remember to keep these frame parts oriented to visually match up with their

corresponding members in the case.

Mortised butt hinges often give people fits — especially in a project like this where the door is actually part of the box and has to line up perfectly. Here's how I tackle the hinge hardware: Locate the hinge leaf on the front edge of the case and align it with a square. Scribe the ends of the hinge. I like to use a marking knife because it cuts the wood cleanly and leaves a groove to align my chisel. Now, mark the width of the mortise with a marking gauge (see left photo, below).

Chuck a 1/4" straight cutter in a trim router and set the bit depth slightly less than half the thickness of the closed hinge. Rout out the waste, stopping shy of the knife lines (see center photo, below).

Clean up these mortises with a sharp chisel, and attach the hinges to the case. At this point, you can set the door's rear frame on the case and knife the hinge locations onto it (see bottom right photo).

Making the Door

It's time to build a cabinet door to accompany that hinged frame. Cut the rails and stiles to size, according to the *Material List* dimensions on page 31. I planned to assemble my door with mini-biscuits but float the panel in a 1/4"-wide, 1/4"-deep groove cut around the inside edges of the rails and stiles. Set up these groove cuts at your router table, and mill them now. Follow the *Drawings* carefully to note where these grooves need to stop so they aren't visible on the assembled door.

With the panel grooves milled, you can create a full-sized "cloud lift" paper template of the top rail profile (see *Drawings*). Cut out your template and trace its profile onto the rail. Head to the band saw to rough-shape it, then clean up the profiles and refine those gentle curves with files and sandpaper.

Cut the door panel to final size, and return to the router table to mill the 1/2"-wide rabbet around its front edges, which will leave you a 1/4" reveal. Now you can cover the back with felt, as you did with the back panel. Be sure the resulting tongue is slightly undersized so the addition of the felt back makes for a snug fit in the door frame grooves. Stick the felt to the back of the door panel, and assemble the door with biscuits and glue.

I cheated a bit when hanging my door to guarantee an even overhang on its rear frame. I used a pin nailer to tack the door



Scribe the hinge mortise locations with a knife and marking gauge, as shown at left. Next, rout out most of the waste with a trim router. Be sure to clamp a piece of scrap wood to the box side to add support for your router base. Mark the hinge locations on the door backer frame with a knife.

to the frame, then fixed the two permanently with countersunk wood screws driven through the frame's inside edges (see center photos, right).

Outfitting the Case

With the door mounted, the cabinet is almost complete. Now it's time to build and fit the adjustable shelves and ring holder trays (see *Drawings* for details, but you can personalize this as you wish). The edging on the shelves creates a lip to keep bracelets from rolling off on the front side. On the back edge they create a hook on the underside to capture the shelf pins. The ring trays hang on angled ledges attached to the cabinet sides. The extra-wide back edge creates a lip to hold the trays onto the ledges. Drill holes into the case top for the two brass necklace carousels, and fix them in place with a drop of epoxy or CA glue. Bore shallow holes into the back face of the door panel for short Shaker pegs to hang necklaces and longer jewelry. Finally, add a small mirror with a mitered frame if you so choose (see *Drawings*).

Finishing Up

It's now time to add the four square cherry peg details on the door's face. Mark and drill 1/4" holes about 1/8" deep on the frame. Use a square to outline the peg shapes. My "back pocket" trick for making square holes is to cut them using a hollow-chisel mortising bit with the drill removed and tapping it gently with a wooden mallet.

Rip a 1/4" x 1/4" cherry blank on the table saw. Cut the blank into short lengths and pound them into their holes with a drop of wood glue. Trim off the excess. I sanded my pegs using a cardboard shield to remove saw marks and create a slightly rounded top.

After sanding all of the surfaces to 220-grit, I topcoated the project with Waterlox satin finish before screwing a brass door knob in place and applying felt dots to cushion the door when it closes.

See what you can do with a few pieces of interesting scrap wood?

Dave Munkittrick is a cabinetmaker and furniture builder who works out of an old pig barn in Wisconsin.



Transfer the top door rail profile onto the rail with a paper template. A white colored pencil is easier to see on dark wood (left). After band-sawing this piece to shape, you'll find that a small rat-tail file is just the ticket for shaping the slight inside curves, as shown at right.



Pin the door onto the hinged portion of the box with a pin nailer (above). Then flip it open and drill pilot holes through the door backer into the door. Attach the door with screws (right), covering the heads with self-stick felt dots, which cushion the door when it closes.



Bore shallow door peg holes before chopping them square with a hollow-chisel mortising bit. Line up the chisel with squared-off marks surrounding the hole. Use a wooden mallet to protect the chisel. Tap lengths of cherry pegs home. Try using cardboard with a hole in the middle to gauge the peg length and to protect the door frame during the final trimming and sanding stages.