Do It Yourself: Shelves & Cabinets

Do It Yourself

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URL: http://www.diynet.com/diy/ww_shelves_cabinets/article/0,2049,DIY_14444_2470474,00.html Inlaid Spice Rack: Decorative Accents From "<u>Wood Works</u>" episode WWK-510 -- More Projects »

With the case and drawers constructed, the drawer joinery is next reinforced using walnut dowels. Once that is complete, the back-panel is installed and the curved crest-rail is made and inlaid with bird's-eye maple.

Materials:

Walnut dowels Mahogany stock for crest-rail MDF for template Table saw Band saw Table router Flush-trim saw Plunge router Router-inlay kit Scroll saw Pattern-maker's rasp 120-grit sandpaper Yellow woodworker's glue Double-stick tape Safety glasses or goggles

Safety Alert: *Always* wear safety goggles or safety glasses when working with wood, power-tools, saws, drills, routers, etc.

Reinforced Joinery and Case Completion

 Because the drawers were glued up end-grain to long-grain, some type of mechanical fastener is needed for added strength. To achieve this, twelve wooden dowels are used to reinforce each of the three drawers. The dowels used to reinforce the drawers of the spice rack are made from dark walnut to provide visual contrast



A curved crest-rail, inlaid with figured maple, crowns the frame of the spice rack.



Figure A

with the maple drawers.

- Once the dowels are cut, bore the dowel holes in each of the drawers. Three holes are drilled at each corner. Two dowels are positioned 5/16-inch from the top and bottom of each corner (figure A), while the third is centered between those two.
- Once the holes are drilled, add yellow glue to the holes and tape the dowels in place using a small hammer (**figure B**). Leave each dowel a little long for trimming.
- Once the glue dries, trim the dowels so that they are flush with the surface using a flush-trim saw (figure C). This specialized saw has a flexible blade and a fine, narrow kerf.
- While the back is off the case, the drawers can be precision fit to fit into their respective spaces. They should be made to slide easily, but not be too loose. Remove rough spots from the outsides of the drawers using a hand-plane, then follow up with 120-grit sandpaper.
- Once the drawers have been precision-fit to their spaces, the backpanel can be added to the case. Cut the back panel to the proper, measured dimensions from 1/2-inch mahogany plywood.
- Apply yellow glue to the rabbets at the back of the case, and to the backs of the shelves (**figure D**).
- Position the back-panel in the rabbet.
- Stand the case upright and clamp the assembly securely to allow the glue to dry (**figure E**).



Figure B



Figure C



Figure D



Figure E

Decorative Crest-Rail

The final piece is the crest-rail with decorative inlay. The crest-rail is made in the same manner that the curved side-pieces were made.

• Make a template from MDF.

- Trace the curved shape onto the mahogany stock (figure F).
- Rough-cut the curved shape using the band saw.
- Flush-trim the crest-rail piece on the table router using the template as a guide (**figure G**).
- Once the stock is cut for the crest-rail, the next step is to cut the oval pattern for the inlay into the MDF template. Mark off the pattern on the MDF, then drill a hole inside the oval shape.
- Feed the blade of the scroll-saw through the hole, and use the scrollsaw to cut out the oval shape (**figure H**).
- Once the shape is cut from the template, refine the oval shape using a pattern-maker's rasp.
- Position the template onto the crest-rail stock (figure I), securing it with double-sided tape.
- The recess for the inlay is cut in the mahogany using a hand-held router. The router is outfitted with a specialized router-inlay kit. The kit includes a 1/8-inch bit, a brass-throated collar that attaches to the router, and a removable bushing (**figure J**).
- Install the template collar-guide to the base of the plunge-router and install the bushing. With the bit set to a depth of 1/8-inch, cut along the outer shape of the oval to define the edge (**figure K**).
- With the edge cut, install a 1/2-inch bit in the plunge router and use it to remove the remaining material in the oval (**figure L**) using extreme care not to cut outside the line.
- For the inlay, mill some bird's-eye maple so that it's just slightly thicker than 1/8-inch. The oval is routed in the maple using the MDF template and the router-inlay kit. This time, however, the cut is made with the bushing off. Place the 1/8-inch maple stock on a sheet of scrap MDF to avoid cutting into the work surface.
- **Tip**: Tape the maple stock to the MDF substrate using double-sided tape to prevent slippage as you complete the cut.



Figure F



Figure G



Figure H



Figure I



Figure J

- With the materials in position, follow the edge of the template with the 1/8-inch router bit to make the oval cut.
- Once the cut is complete, gently lift out the oval inlay (figure M).
- You may want to slightly bevel the edge of the inlay with sandpaper to provide a better fit into the recess.
- **Tip**: To avoid damaging the delicate inlay during dry-fit, drill two small holes through the recessed section of the crest-rail that will be covered by the inlay. Once the inlay is inserted, it can be popped out from behind using a dowel or other small instrument.

In the segment that follows, the inlay in place, the crest-rail is installed and the spice rack is given a fine wood finish.

• ALSO IN THIS EPISODE:

Inlaid Spice Rack: Mahogany Case-Stock Inlaid Spice Rack: Case Assembly and Drawers Inlaid Spice Rack: Decorative Accents Inlaid Spice Rack: Finishing Touches



Figure K



Figure L



Figure M