

PROJECT



Construction Time Again

*With some extra sawing
and planing, you can transform
humble materials into another
high-quality project*

BY STEVE MAXWELL

I BUILT THESE DRESSERS for two of my boys, to go with their bunk bed featured in the last issue of *Canadian Home Workshop*. And like the bunks, I used kiln-dried construction-grade 2 x 10s for almost all parts of these dressers. It's inexpensive, strong and attractive wood, but you do need access to a thickness planer and jointer to make use of it for cabinetmaking. You must also air-dry wood as you work, since construction lumber is too wet for indoor use, even if it is stamped "kiln dried." See "Fine Furniture From Cheap Wood," on page 24 of the November 2000 issue for details.

Start by sorting through your lumber pile and rough-cutting parts 2" longer than listed. Don't worry about ripping to width yet. That step comes later. You'll need to attune your eye to three levels of wood quality as you work. The best

wood, with the most striking areas of grain, should be reserved for the shop-cut veneer of the drawer faces if you're using this approach.

Saving Face

CUT THE NEXT BEST WOOD for the sides and top. Material with larger flaws can be used for stretchers, since most of their surface is hidden. Only the front edge of five of the long stretcher members needs to look good. Use a lumber crayon to label pieces of wood you've earmarked for different dresser parts. Often a section of a board is good enough for a prominent use, while the rest needs to be kept hidden. Crayon lines and labels help keep everything straight as you're crosscutting.

Finish the roughing out stage by ripping parts $\frac{1}{2}$ " wider than final size. To speed drying, stack all parts with spacers between the layers at the end of each work session. A room fan blowing on the pile speeds drying time substantially. A few days of this steady air movement makes quite a difference to the wood's moisture level, especially in dry, wintertime conditions.

Plug in your thickness planer, get a bunch of garbage bags ready for an avalanche of shavings, and mill all wood (except the drawer parts) down to $1\frac{1}{16}$ " thickness. This is thicker than you'll need for final parts, but it allows for final jointing and planing to correct any twists or cups that develop. Stack the main dresser parts with spacers between each layer, then turn your attention to the drawer face veneer.

The bookmatched drawer face figure in the photos looks exotic, but it's easy to find in any lumberyard pile. Look at the outer edges of wide construction planks and you'll see that the growth rings are often perpendicular to the plank face. This happens whenever a board is cut near the centre of a log, as most wide boards are. When this grain feature also shows sharply contrasting colour between the growth rings, you've found a striking piece of wood. The effect never extends across an entire board, so don't look for a big

chunk of it. But the good stuff is often wide enough to cover the 8"-tall drawers in two pieces. Rip areas with prominent grain to 5" wide, then slice $\frac{3}{8}$ "-thick sections from these boards. Joint and mill the pieces, then edge-glue them together before gluing to your drawer fronts.

Drawer Ins and Outs

I WANTED TO keep these dressers as simple as possible. That's why I made the drawers run directly on the stretcher frames that join the sides. Drawer width is maximized because there's no need to leave room for mechanical slides, and drawer action is smooth as long as the drawer-to-dresser clearance is $\frac{1}{2}$ " on each side. A larger or smaller clearance will result in sticky or wobbly drawer movement. My approach in this case is to build the drawers first, then build the cabinet-work around them.

The plans show the factory-made dovetail drawers I used, though any drawer will work. For smooth drawer movement, sand the drawer sides and bottom edges as you would any finished surface. Don't bother sanding the drawer faces, as that's part of levelling the drawer faces to the surrounding cabinet, something that comes just before finishing.

Joint, plane and edge-glue the boards for the dresser top and sides. You'll find it easiest to do this in two stages. First, glue boards together so they're 9 $\frac{1}{2}$ " or 10" wide, then run them through your thickness planer to bring them down to final thickness. Next, glue matching boards together. This leaves just one joint down the middle to sand smooth. Cut these parts to final length and width after all sanding is done, then rout a $\frac{1}{4}$ "-deep x $\frac{1}{2}$ "-wide rabbet along the back, inside edge for the back panel.

DRAWER BEWARE

COMMUNICATION. It's what very good relationships are built on, even between customer and supplier.

I was pressed for time building these dressers, so I ordered eight custom-made, dovetailed drawers to speed my progress. The experience reminded me how important it is to ask questions—especially when buying by mail order or over the Internet.

When I spoke to the company's representative, I specified a front face cut from clear pine, explaining that I wanted it to be presentable so I didn't have to add a separate front. When they arrived, the faces were indeed clear of knots, but they were also made of many tiny stacked laminations, some as narrow as $\frac{1}{8}$ " and some of differing colour. They looked more like shipping crates than furniture. Whether this was a result of miscommunication on



ORDERING COUNSEL: Factory-made drawers can save time, just know what you're getting when you order

my part or poor quality control on the supplier's part, I could have avoided a minor headache by asking a few more questions when I placed the order.

To solve the problem I sliced $\frac{3}{8}$ "-thick, bookmatched pieces of the best quarter-sawn spruce I found in my construction-grade planks, edge-glued them into thin panels, then glued these to the sliver-wood drawer faces I'd paid good money for. After all this, I doubt I saved much time with these drawers. Next time, I'll get more information first.

If you've had a similar experience, post a message to our Internet forum at www.canadianhomeworkshop.com so we can all avoid potential pitfalls.—S.M.

PLANS FOR THE DRESSER

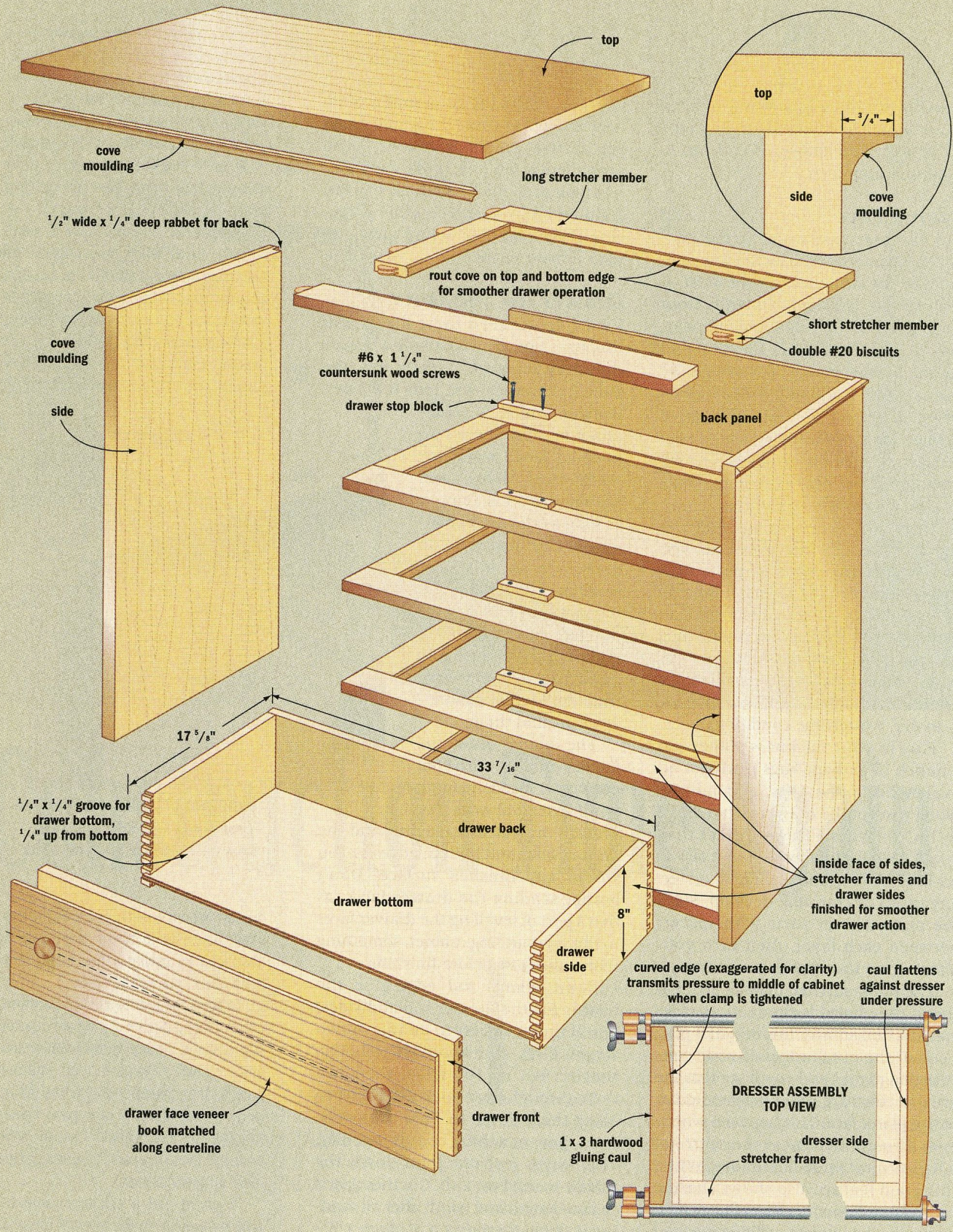
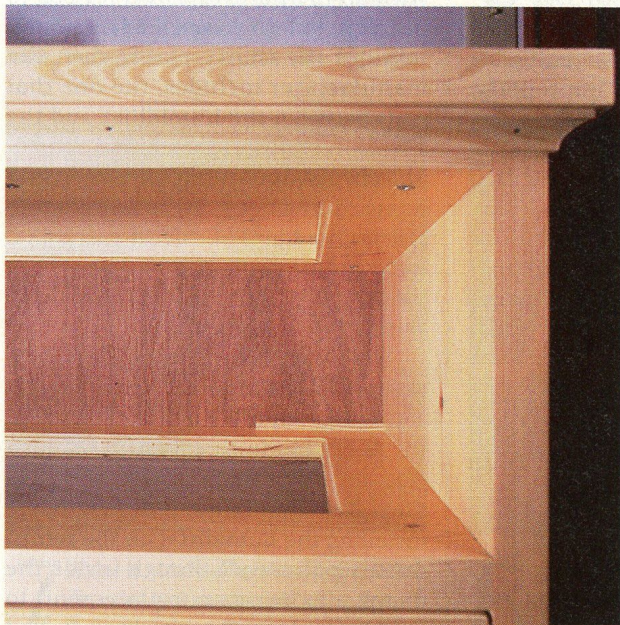


ILLUSTRATION: LEN CHURCHILL

The stretchers that join the sides are four-part frames connected with two #20 biscuits at each corner. Prepare the stretchers—when the glue has dried, sand the joints flat and smooth. I routed the inside edges of the stretchers to a cove profile, to ease the passage of the drawers over them. A roundover bit would do a good job, too. The assembled stretchers are slightly longer than needed for the drawers, so you can fine-tune the drawer opening, as you'll see next.

Put the completed drawers on your shop floor, on their backs. Position the assembled stretchers between each drawer, and above and below the group. Set the dresser sides next to the drawers and check the clearance on each side of the drawers. It'll probably be too much, so trim the length of the stretchers slowly until you've got 1/2" of space on each side of the drawer. While you're at it, mark the ideal location for the stretchers on the dresser sides. Aim for about 1/6" clearance above each drawer. Shop-cut wooden spacers help. As a final check, clamp the sides tight to the ends of the stretchers and check drawer movement. If it's too sloppy, trim more off the stretchers; if too tight, sand or plane away the high spots on the drawers. Be sure to mark the location of each drawer so you can return it to its custom-fitted opening later.



GOOD TECHNIQUE allows you to slide the drawers along the stretchers: size the opening carefully, rout the inside edge of the stretcher and finish the surface to reduce sliding friction

Biscuits or dowels are ideal for joining the sides and stretchers. Plunge slots or drill holes now, but don't assemble anything with glue yet. It's time to sweep up and do some finishing.

To reduce friction where the drawers ride along the stretchers, I pre-finished the insides of the dresser before assembly, using the same waterbased urethane I later sprayed on the outside surface. A strip of masking tape over the biscuit slots in the sides and stretcher ends keeps that wood bare and ready for glue.

While there are a lot of biscuits or dowels to deal with, final assembly of the dressers is easy. Gluing cauls spread pressure from two pipe clamps across the entire width of the dresser's side. Get the parts together, and don't forget to wipe the glue squeeze-out from the insides after applying clamping pressure. When the glue has dried, install the drawers so their faces extend very slightly beyond the front of the dresser, then screw the drawer stop blocks to the top of the stretchers, tight to the back of the drawers.

Lay the dresser down on its back and secure the drawers with a few shims on the sides. Then belt sand the entire face of the unit flat and smooth as a single unit. Cut the 1/4" plywood back panel now, but don't install it yet. Give everything a final sanding before finishing the outside.

I sealed the dresser with four coats of ICI waterbased urethane, hand-rubbed to a medium sheen. The top is secured with #10 x 1 1/4" screws driven through the stretchers. Fasten the cove moulding with 2" finishing nails, and the back panel with #6 x 1" screws. When my dressers were almost complete, I noticed for the first time that they looked too serious for my boys. That's why I installed large, round knobs sprayed with four coats of red and blue enamel. These lighten the mood, yet aren't permanent. 🛠️

Technical editor Steve Maxwell lives and works in his well-furnished Manitoulin Island home. Visit his Web site at www.workshoptalk.com.

YOU WILL NEED

| PART | SIZE | Qty. |
|-------------------------|---|------|
| Sides | 1 1/8" x 18 5/8" x 38 3/4" | 2 |
| Top | 1 1/8" x 19 1/2" x 37 3/4" | 1 |
| Long stretcher members | 1 1/16" x 3 3/8" x 33 5/8"* | 10 |
| Short stretcher members | 1 1/16" x 3 3/8" x 11 3/4" | 10 |
| Drawer boxes | 8"-high x 17 5/8"-wide x 33 7/16"-long | 4 |
| Drawer face veneer | 3/8" x 8" x 33 7/16" | 4 |
| Drawer knobs | 1 3/4" dia. | 8 |
| Cove moulding | 3/4"-wide x 82" (total length required) | 1 |
| Back panel | 1/4" x 34 3/4" x 38 1/2" | 1 |
| Drawer stop blocks | 3/8" x 1/2" x 6 1/4" | 8 |

Parts listed for one dresser only.

*Over length part. Trim to final size after stretcher assembly.