On the Job

Victorian-Style Door Casing

by Brian Campbell

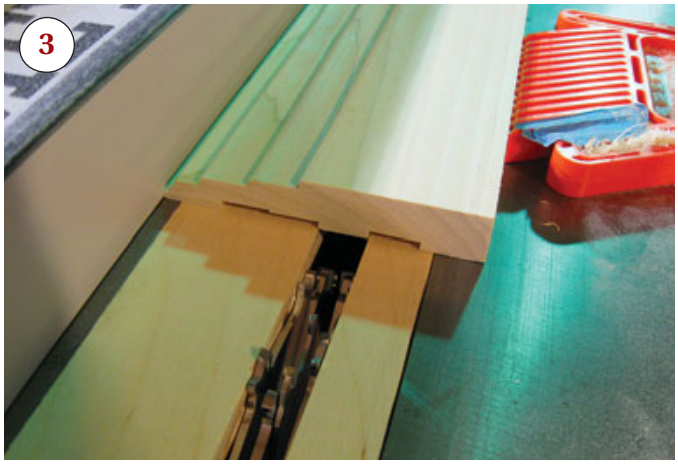
One of the things I like about working on a historic home is the challenge of matching new work to old. Last summer, I was hired to do the finish work for a kitchen remodel in a 19th century Victorian home in Winona, Minn. The kitchen had been previously remodeled sometime in the 1960s in a contemporary style incompatible with the home's period look. We replaced the door trim, matching the style of the original casing elsewhere in the home. The casing was a built-up treatment using several custom molding profiles **(1)**. There were only five doors to trim — a small run to outsource to a millshop — so I decided to keep the milling in-house. Because the work was paint-grade, I used yellow poplar, a wood that mills well and takes paint nicely.

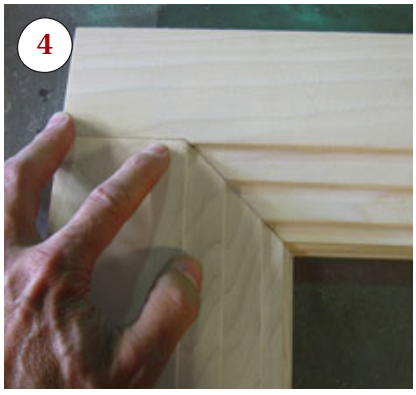
Stepped casing. The main body of the casing has a triple-stepped profile with a quarter-round bead along the inside edge. I ripped 1-by lumber to a finished width of 4 3/4 inches and then cut the bead on my router table. I made the steps in three successive passes on my table saw **(2)**. Feeding the stock on edge, I started with the tallest cut, raised the blade to 2 1/8 inches, and shaved 1/8 inch off the face. The subsequent steps are each 3/4 inch narrower than the previous one, produced by lowering the blade and moving the fence 1/8 inch closer to it. I eased the corners on the steps with light hand-sanding. To eliminate major sanding, I used Freud's glue-line rip blade (978/562-5575, freud-tools.com), a 30-tooth triple-chip blade that produces really smooth, swirl-free cuts.

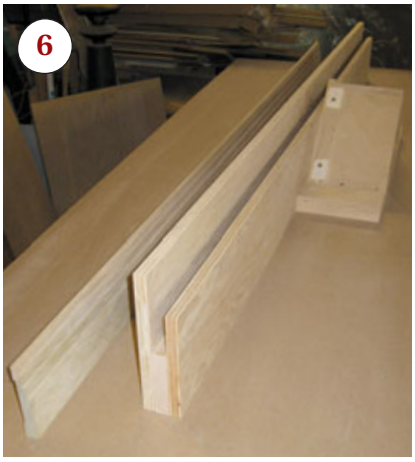
To provide full support behind the stock, I attached a tall auxiliary face to the table saw's fence. Feather boards hold the stock firmly against the fence and are indispensable to smooth, even cutting. I mounted the outfeed feather board on a sled board clamped to the saw table. The sled elevates the feather board higher on the face of the stock, helping to prevent it from tipping away from the fence.

I used a dado head in the table saw to relieve the back of the casing **(3)**. It took four passes, flipping the stock end-for-end and repositioning the fence once.

All told, it took me 10 hours to produce 126 linear feet of the stepped casing, a labor cost of $600. I paid $150 for the lumber, which brought the total cost to $750, or $5.95 per







linear foot. While this seems pretty reasonable, a bigger run would quickly justify outsourcing the work to a millshop.

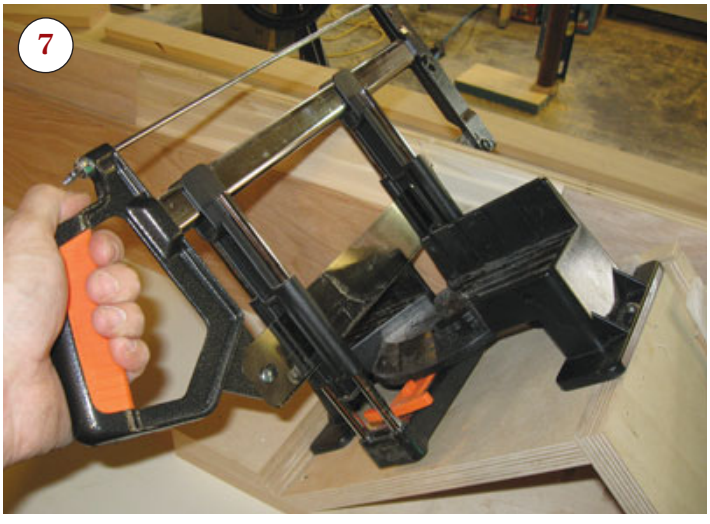
Jack miters. The carpenter who installed the original casing used a jack miter, a combination of a butt joint and a miter, to join the stepped casing stock **(4)**. A common miter joint across a 5-inch-wide board would be about 7 inches long. But with seasonal changes and Minnesota's dry winter air, long miters can open up; a jack miter helps to counter this tendency.

When hand saws were the only option, jack miters were rather easy to make. A power miter saw actually adds a step, since you still have to use a hand saw to finish the inside shoulder cut **(5)**. To simplify things, I built a jig that made short work of the miter cut.

The jig holds the casing on edge with only the profiled, mitered portion exposed **(6)**.

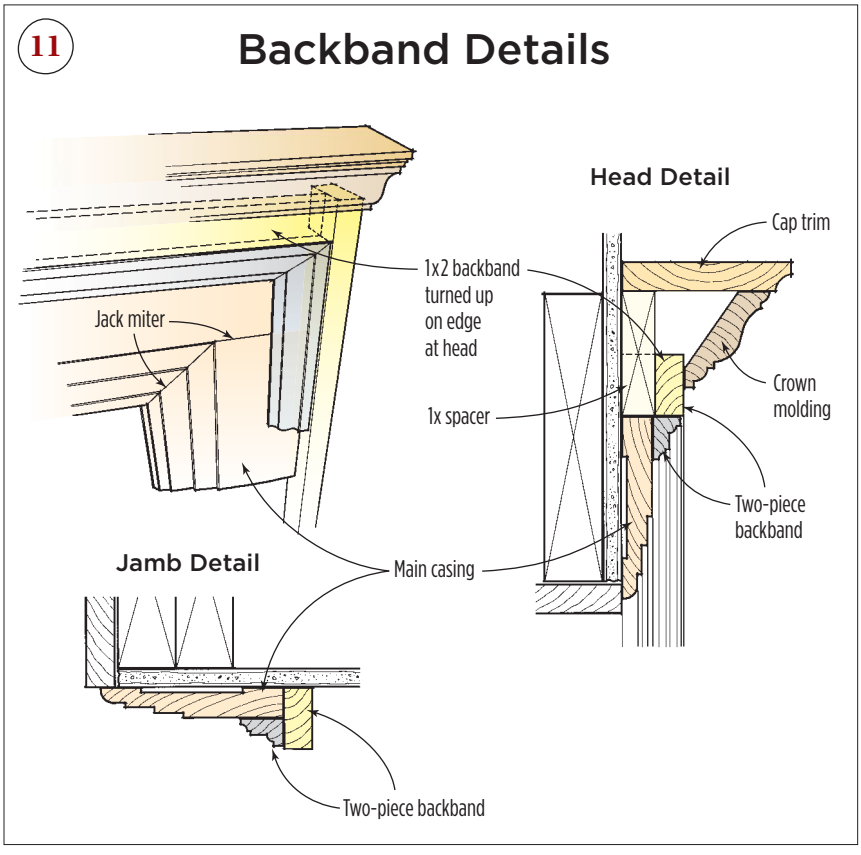
I used a Jorgensen "mini-precision" miter saw mounted on a 45-degree angle block **(7)**. The saw is small and inexpensive (about $20) and has a short stroke. It's not a pro-grade tool, but its small size worked well for this jig. I cut all the left-hand miters at once, then reset the miter saw on the opposite angle to make all the right-hand cuts.

Because my job-site "shop" was outdoors and subject to rain days, I took careful measurements at each door and precut most of the stock at my shop. Each doorway called for 15 pieces of trim and 24 separate cuts.



I assembled the jack miters on site. To help restrict movement, I used Titebond's Molding and Trim glue (800/669-4583, titebond.com) along with pocket-hole screws to hold the joints together **(8)**. The glue is self-filling and works particularly well on porous end grain; it also sets quickly and sands easily.

Backband. I produced the profile for the two-piece backband on the router table, first hogging off the waste wood on



the table saw **(9)**. The backband turns vertically across the head casing for a slightly wider reveal **(10)**.

I nailed the casing to the jambs with 1 1/4-inch 18-gauge finish nails and the outer edges to the wall with 2-inch 16-gauge nails. The backband is glued and nailed with the 18-gauge nails. The crown return miters are nailed with a 23-gauge micropinner.

The 2 1/4-inch crown molding on the head casing was the only stock molding I used in the assembly. A flat, nominal 1x2 cap with a coved edge detail finishes off the crown **(11, 12)**.

***Brian Campbell** is a carpenter in Minnesota City, Minn.*

Hot Dogs, Anyone?

by Steve Sisler

We call it the Hot Dog House because our young sons pretended to sell hot dogs out of it while it was being built in our driveway. It's a simple shed with a peaked roof and four wooden doors that open up along the sides so we can reach in for tools, supplies, plans, and schedules. Inside are shelves and lots of little cubbies for organizing hand tools, screws, nails, caulk tubes, and so forth. We put big tools like stepladders, compressors, and generators on the floor in the middle. These big items typically get moved out onto the site and the rest stays inside, where we can usually find what we're looking for.

The Hot Dog House is transported on a trailer, where it often stays, but it's also light enough to be lifted off and placed on the ground when that's called for.

***Steve Sisler** owns Sisler Builders in Stowe, Vt.*