



# Bench-Mounted Router Table

A three-part table clamps to a workbench, and it hangs from the ceiling when not in use

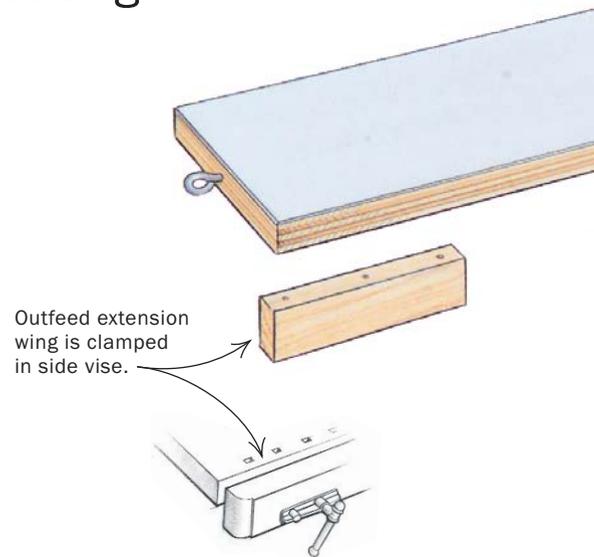
BY PAUL MANNING

I was getting ready to make grandfather clocks—one for each of my three children—and I needed a router table. The clocks entailed routing lots of curved moldings, raised panels and long boards, and their imminence finally forced me to think about designing a router table that would suit my needs. Because of the limited floor space in my basement shop, I hesitated to build a freestanding unit. And I discarded the idea of building a table where the router would sit on my workbench because it would make the work surface too high to work at comfortably.

It occurred to me that I could make a suitable router table that took advantage of the features of my very sturdy 8-ft.-long cabinetmaker's workbench, if I could design the table so that the router hung below the workbench surface. In effect, my router table is really only a router tabletop in that it has no legs and gets its sturdiness from being clamped to the bench. The table has three parts: the main table, which is the center section that holds the router and fence, and infeed and outfeed extension wings, which are clamped in the tails and side vises, respectively. Best yet, when I'm not using the table, the whole thing hangs on hook eyes from my basement ceiling joists, freeing up valuable floor space.

## Buy the fence and build the table from scraps

I bought a phenolic-resin router-base insert and a cast-aluminum router fence from Trendlines (888-234-8665) for about \$120. I



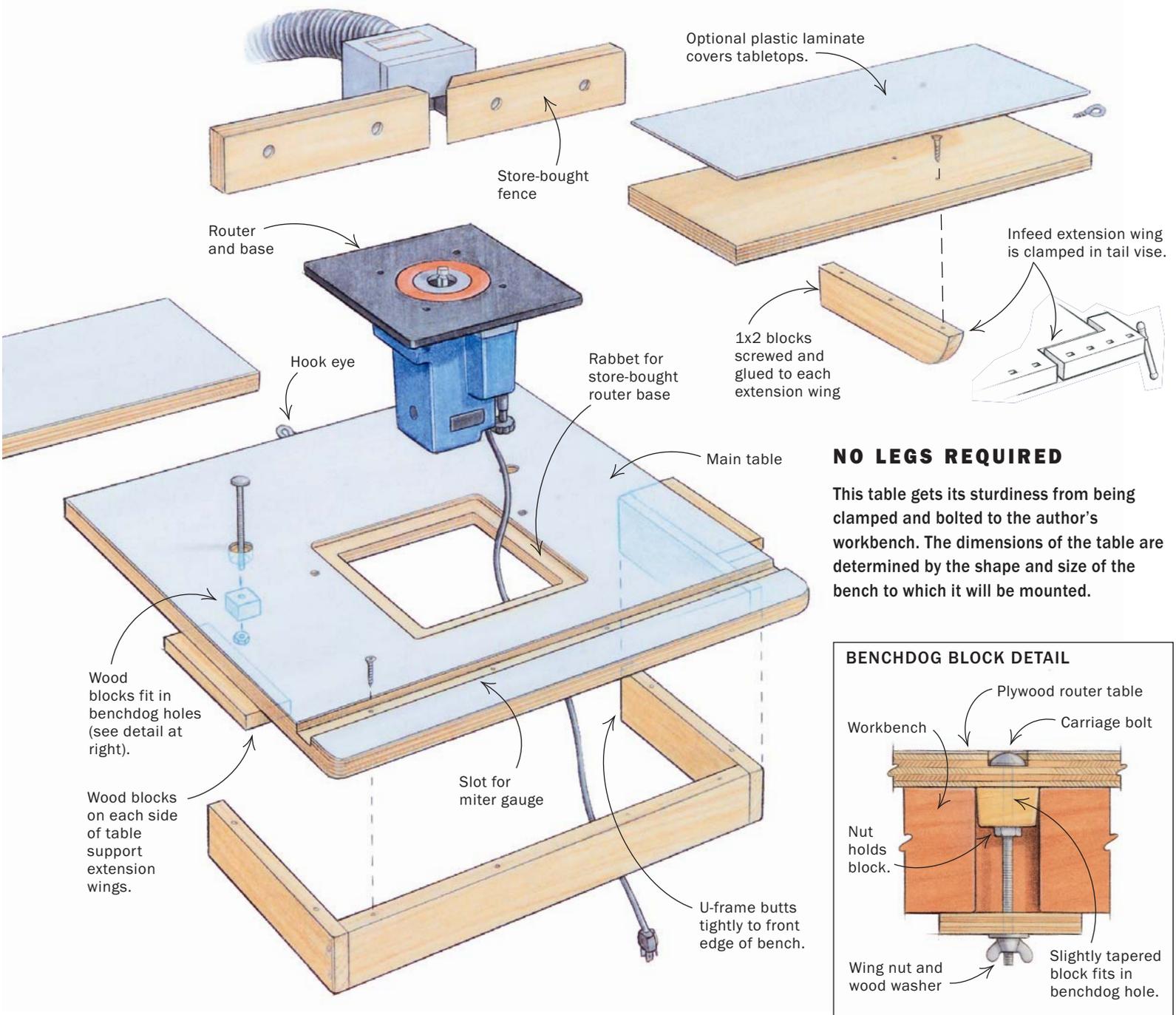
had been thinking about building a fence, and while toying around with a design idea, I came across what I thought was a perfectly adequate system from Trendlines. The system has 14-in.-long adjustable fences and a dust-collection port that plugs right into my shop vacuum.

My bench is very heavy. Even with the weight of the router and the 13-in. cantilever of the router table, the bench is sturdy enough that it won't tip forward, and thus no supporting legs are needed under the front edge of the table.

My main table is 30 in. wide and 24 in. deep, but obviously you'll have to size your table to fit the size and shape of your workbench. The most important dimension is the location of the router itself. It should be mounted as close as possible to the front edge of the workbench. The extension wings can be of any length and width, but I made mine 6 in. narrower than the front edge of the main table so that I can stand close to the working router bit.

The tabletop extends beyond the U-frame, permitting the use of clamps for featherboards and hold-downs and making room for a miter-gauge slot. The exten-

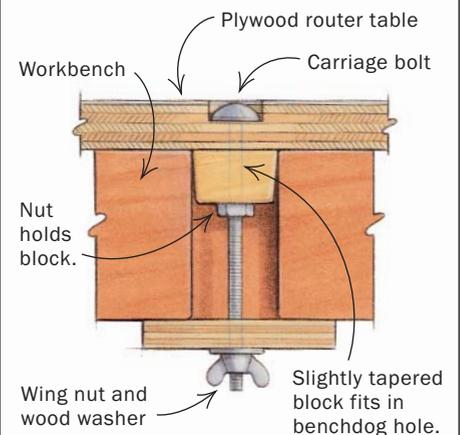




## NO LEGS REQUIRED

This table gets its sturdiness from being clamped and bolted to the author's workbench. The dimensions of the table are determined by the shape and size of the bench to which it will be mounted.

### BENCHDOG BLOCK DETAIL



sions have short pieces of hardwood underneath for insertion into the bench vises.

### Assembly suggestions

After cutting the plywood for the main table, I transcribed the locations of two benchdog holes onto the plywood. To register the benchdog blocks in the holes, I glued and loosely bolted each one to the plywood with a short bolt. While the glue was still wet and the bolts were loose, I inserted the blocks into the benchdog holes. I then tightened the bolts and quickly removed the table.

After the glue dried, I replaced the short bolts with long carriage bolts, inserted the table into the benchdog holes and fixed the table to the bench with wing nuts (see detail drawing above). Holding the U-frame tightly against the front of the bench, I clamped it to the plywood, then screwed through the tabletop and into the U-frame.

For the extension wings, I clamped cleats in the bench vises and then aligned the tops of the extension wings, pushing them tight to the main-table edges. Then I screwed through the extension wings and into the cleats.

Note in the drawing that a block of wood is also glued and screwed under the main table's ends and protrudes 1 in. to provide a shelf support for the extension wings and to keep all surfaces in the same plane.

The table is well sealed with polyurethane, and the top surfaces are covered with plastic laminate. The plastic laminate is not an absolute necessity; a table that is well sealed and sanded smooth should be satisfactory. The grandfather clocks, by the way, turned out great. □

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