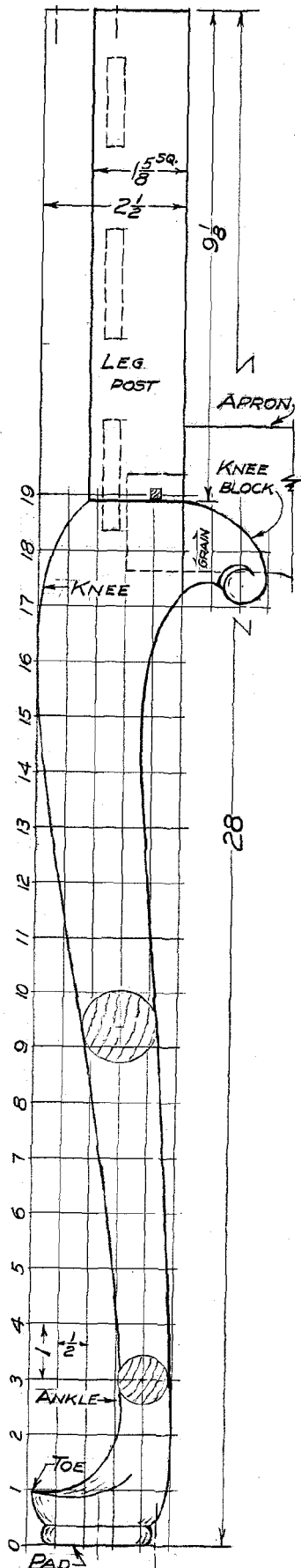


A Small Highboy

Plans for a Queen Anne charmer

by Carlyle Lynch

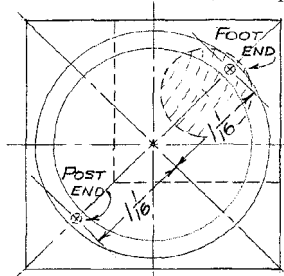


Author with his highboy of cherry, adapted from the mahogany original.

The highboy is an imposing furniture form, too large for the spaces in which most of us live. But 18th-century cabinetmakers didn't always build grandly scaled furniture for stately halls. Shown here is a small, modestly proportioned highboy I found in the home of Mr. and Mrs. Richard P. Lewis in Augusta County, Va. Included in the drawings are a few adaptations—simpler moldings and a less arched front apron that accommodates one more drawer than the original. I built the piece to test these alterations. Here are the basic procedures; a bill of materials is given on p. 34.

The legs—Begin by squaring the pieces for the legs. The article that follows on p. 36 gives a method for shaping cabriole legs with a bandsaw and hand tools. Here's how the lathe can be used, in addition to the tablesaw, bandsaw and hand tools, to shape the foot and ankle of these cabriole legs: Make a pattern from the drawing on the facing page, and lay out the leg on the two inside faces, so that the apron, sides and back will all fit flush with the post block. Cut the mortises in the post blocks while the leg blanks are still square.

To shape the legs, first draw diagonals on the leg ends to mark their centers, and punch a mark on each end $1\frac{1}{16}$ in.

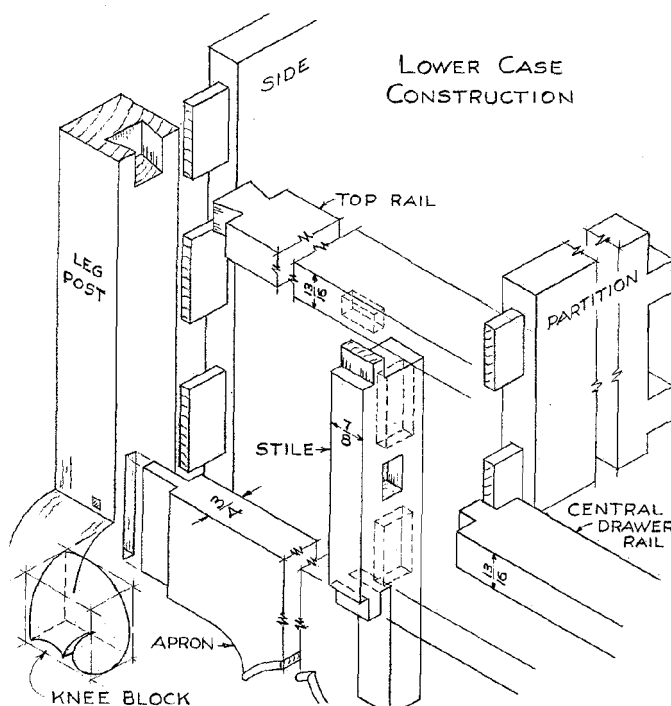


off-center, as shown in the drawing below. Mount each blank in the lathe on its true centers, with the foot end at the tailstock, and turn the foot. Shape it to the top of the pad, but don't finish turning the pad yet, or you will lose the offset center you need to turn the ankles. Remount the blank on the two opposing offset centers

and turn the ankles. To someone not used to making cabriole legs, the setup looks forbidding. Use slow speed, and take light cuts with a sharp gouge or round-nose chisel held tight and fed slow. You can turn and sand 2 in. to 3 in. of the ankle, and sand to the top of the foot, before remounting the blank on its true centers to turn and sand the pads.

Take the blanks to the tablesaw, and with a smooth-cutting blade set for maximum height, cut the waste to form the post blocks. Set up a stop block to prevent going too far. In order to keep the post block flat on the table, cut two of the legs with the rip fence to the right of the blade, two with the fence to the left of it. Finish the cuts on the bandsaw and then rough out the rest of the leg. Bandsaw to the pattern line on one face, tape the scraps back in place, turn the leg 90° and saw again to the lines on the scraps. Final shaping is done with spokeshave, rasp and scraper.

The lower case—Mill out the apron, sides and back, then cut the tenons to fit the mortises in the leg. Cut the bottom edge of the sides to shape, but wait to scroll-cut the apron until a gentle fit of its tenons poses no danger of breaking it. Dove-

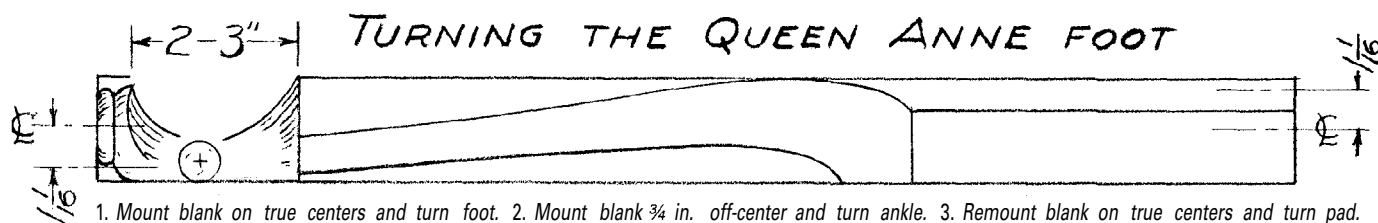


tail the top rail into the top of the front legs, and test-assemble the frame (drawing, above). Disassemble, and cut the mortises in the apron and the top rail for the drawer stiles, and in the stiles for the central drawer rail. Tenons are $\frac{5}{16}$ in. thick by 1 in. long, except the stile tenons, which are $\frac{1}{2}$ in. long. Use poplar, pine or other secondary wood for the partitions that mortise into the back edge of the stiles and into the case back. Nail three drawer runners and a kicker strip to each of these partitions.

Now add the cock beading to the apron edge. Cut strips of mahogany $\frac{1}{8}$ in. thick, $\frac{15}{16}$ in. wide, and long enough to bend around the curves with enough to spare for cutting the miter joints. Round one edge with a small plane. Use a small gouge to make a groove in a sanding block for smoothing the round. You can use this same block later, to sand the cock beading for the drawers.

Bend the apron beading strips between pairs of plywood forms, shaped to accommodate clamps. Make the curves of the forms a little tighter than the apron radii shown, to allow for springback. Also, make sure the curves on the forms are smooth, as rough or flat places can show up in the bent strips. Boil the strips in a shallow pan of water for ten minutes or so and clamp them in the forms while hot. When they're dry, finish-sand the beading and the apron face, miter the strips, and attach them with glue and small brads. Then fit and attach the short, straight pieces of beading.

Before gluing up the lower case, dry-assemble it to check



for fit and squareness. Disassemble, scrape and finish-sand all parts. Then glue the legs to the sides, clamping the two sub-assemblies together, if necessary, to make them lie flat. You can pin the tenons now, while these subassemblies are in clamps, or after the whole case is glued up. Drill $\frac{3}{16}$ -in. holes (four in each side) into the post blocks and through the tenons, coat the inside of the holes with glue, and hammer in $\frac{3}{16}$ -in. square pins. A small handsaw with set removed will trim off the pins that protrude, without marring the surrounding surface. Pare flush with a sharp chisel.

While the sides are drying, glue up the front frame, then glue the partitions between this and the back. When these are dry, finish gluing up the lower case, clamping and checking for squareness, and pin the two apron tenons and the four tenons at the corners of the back.

To shape the knee blocks, bandsaw the six blanks and glue each one to scrap wood with paper in the joint. Use the scrap to clamp in the vise while rough-carving the blocks. Match the shape of the blocks to the contour of the leg's knee. When they're shaped, pry the blocks from the scrap, scrape off the paper and glue, and glue the blocks in place. Now finish carving the blocks to fair smoothly into the leg.

The upper case—Begin the upper case by milling the stock and cutting it to length. Along the back edge of each side, cut the $\frac{1}{2}$ -in. rabbet for the backboards, and cut the grooves to

receive the buttons that will hold down the case top (detail A, facing page). Mortise the sides to receive the drawer rails—three front and three back. Cut the $\frac{1}{2}$ -in. long tenons on the rails—twin tenons for the front, single tenons for the back. For the top and bottom rails, cut the half-sliding-dovetail slots in the top edge of the sides (detail B) and the dovetail mortises in the bottom edge. Fit the corresponding dovetail tenons in the top and bottom rails. Test-assemble the case, then take it apart and plow the slots in the inside edges of the drawer rails to receive the tenons of the drawer runners (detail C). The runners have $\frac{1}{2}$ -in. long tenons that fit these grooves, and they will be left unglued; the distance between shoulders is $\frac{1}{8}$ in. short to allow the sides of the case to shrink. The inside edge of the top front rail is also mortised to receive the loose tenon of the top-drawer kicker strip. This does not connect to the back rail, but like the drawer runners will be attached to the side with a single screw. Test-assemble all parts, then take the case apart and glue it up.

The case sides are plain. The top that overlaps them is now molded on three edges and fastened with wood or metal tabletop buttons. Nail the molding strip under the top.

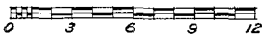
The drawers—All the drawers are constructed alike—dove-tailed front and back, with the bottom slid into a groove in the sides and the front, and secured with nails to the bottom edge of the drawer back, as shown in detail D. (For a

BILL OF MATERIALS							
Amt.	Description	Wood	Dimensions T x W x L	Amt.	Description	Wood	Dimensions T x W x L
Lower case				Drawers**			
4	Legs	mahogany	2½ x 2½ x 28	2	Fronts	mahogany	¾ x 6⅝ x 7⅞
1	Knee block (makes 3 pairs)	mahogany	¾ x 1½ x 15	2	Backs	pine	½ x 6⅝ x 7⅞
2	Sides	mahogany	¾ x 10½ x 15½ s/s	4	Sides	pine	½ x 6⅞ x 17½
1	Apron	mahogany	¾ x 4½ x 28¾ s/s	2	Bottoms	plywood	¼ x 6⅝ x 17¼
1	Top rail	mahogany	1⅜ x 1⅝ x 28¾ s/s	2	Fronts	mahogany	¾ x 2⅝ x 11⅝
1	Back	pine	¾ x 10½ x 28¾ s/s	2	Backs	pine	½ x 2⅝ x 11⅝
2	Drawer runners	pine	¾ x 1½ x 17¼	4	Sides	pine	½ x 2⅝ x 17½
2	Drawer guides	pine	¾ x ⅞ x 15½	2	Bottoms	plywood	¼ x 11⅞ x 17¼
2	Kicker strips	pine	¾ x 1⅝ x 16⅜	1	Front	mahogany	¾ x 3⅝ x 28⅞
2	Drawer stiles	mahogany	⅞ x 1⅝ x 7 s/s	1	Back	pine	½ x 3⅝ x 28⅞
1	Central drawer rail	mahogany	1⅜ x 1⅝ x 12 s/s	2	Sides	pine	½ x 3⅝ x 16¾
2	Partitions	pine	⅞ x 8½ x 16⅝ s/s	1	Front	mahogany	¾ x 4⅝ x 28⅞
6	Drawer runners	pine	⅝ x ¾ x 17¼	1	Back	pine	½ x 4⅝ x 28⅞
2	Kicker strips	pine	¾ x 2 x 16⅜	2	Sides	pine	½ x 4⅞ x 16¾
1	Apron cock bead	mahogany	⅞ x 1⅝ x 40	1	Front	mahogany	¾ x 5⅝ x 28⅞
14	Joint pins	mahogany	⅜ x ⅜ x 2	1	Back	pine	½ x 5⅝ x 28⅞
1	Molding	mahogany	¾ x 2 x 32½*	2	Sides	pine	½ x 5⅝ x 16¾
2	Moldings	mahogany	¾ x 2 x 19*	1	Front	mahogany	¾ x 6⅝ x 28⅞
1	Filler strip	pine	½ x 1⅝ x 28½	1	Back	pine	½ x 6⅝ x 28⅞
Upper case				2	Sides	pine	½ x 6⅞ x 16¾
2	Sides	mahogany	1⅜ x 17⅞ x 26¾	4	Bottoms	plywood	¼ x 16½ x 27⅝
1	Top	mahogany	¾ x 19⅞ x 33½	11	Cock bead	mahogany	⅞ x ⅞ x 30
4	Drawer rails	mahogany	1⅜ x 2¼ x 28½ s/s	4	Cock bead	mahogany	⅞ x ⅞ x 30
1	Top rail	mahogany	¾ x 1¾ x 28½ s/s		Stops	pine	from 1 x 2 stock
4	Back rails	pine	1⅜ x 1½ x 28½ s/s	Hardware: Ten brass pulls, four ⅝-in. dia.			
1	Back top rail	pine	¾ x 1¾ x 28½ s/s	brass knobs; available from Mason & Sullivan,			
8	Drawer runners	pine	1⅜ x ¾ x 13¼ s/s	586 Higgins Crowell Rd., W. Yarmouth,			
2	Drawer kickers	pine	¾ x ¾ x 15¼ plus ½-in. long tenon, one end	Mass. 02673.			
	Backboards	pine	½ x 26¾ x 29½	s/s = shoulder-to-shoulder. Allow ½ in. to 1 in. extra length for each tenon or dovetail.			
1	Top molding	mahogany	½ x 1½ x 31¾*	* Allow extra for final trimming.			
2	Top moldings	mahogany	½ x 1½ x 18¾*	** Dimensions include ⅛-in. vertical allowance for humidity changes.			
1	Molding backing strip	pine	½ x ½ x 76				

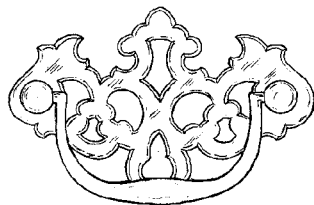
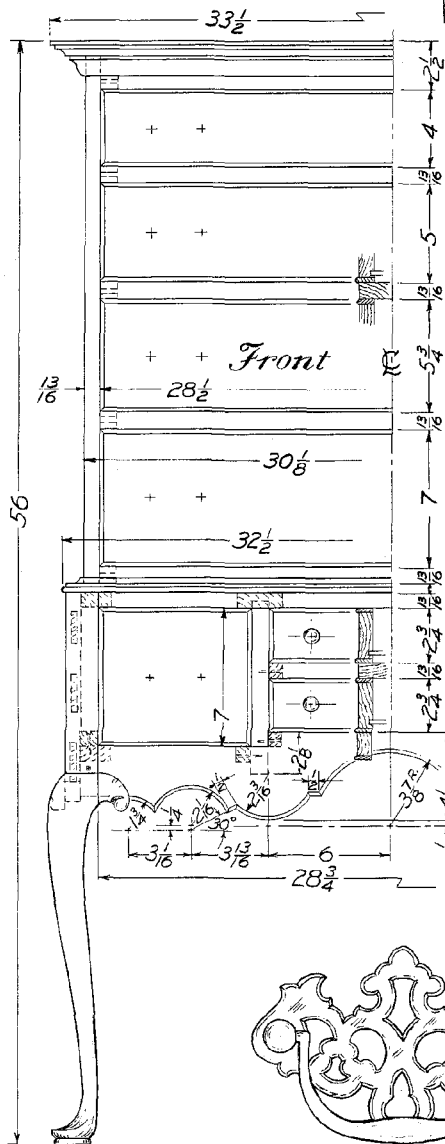
SMALL QUEEN ANNE HIGHBOY

*Courtesy Mr. & Mrs. Richard P. Lewis
Augusta County, Virginia*

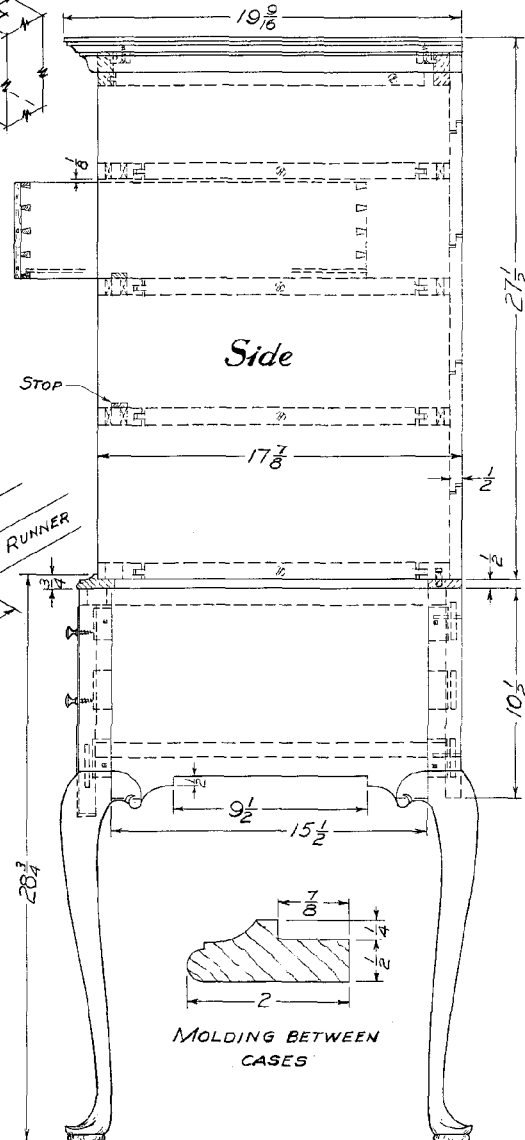
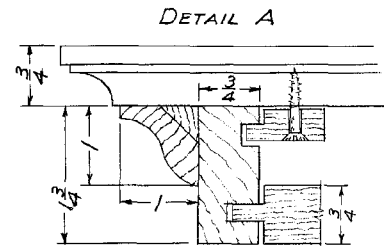
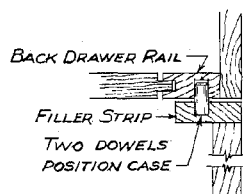
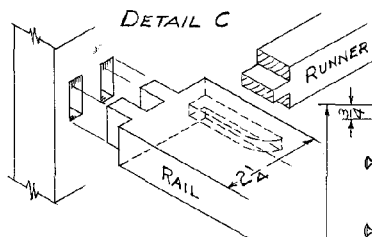
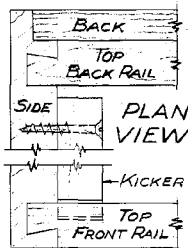
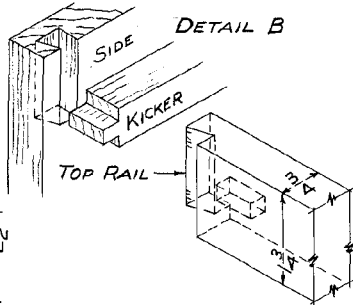
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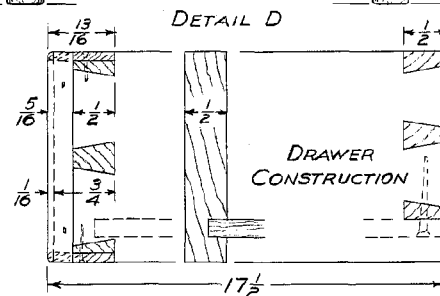
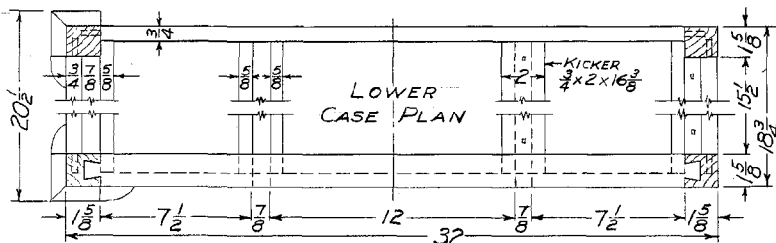
FRONT, SIDE ELEVATION
AND PLAN



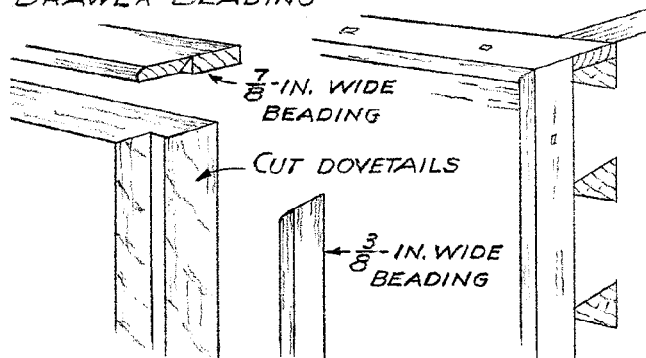
POLISHED BRASS PULL



MOLDING BETWEEN CASES



DRAWER BEADING



detailed discussion of standard drawer construction, see *FWW* #11, pp. 50-53.) The cock bead is $\frac{1}{8}$ in. thick and either $\frac{1}{8}$ in. or $\frac{3}{8}$ in. wide, depending on whether it goes on the top and bottom edges of the drawers or on the sides (drawing, above). Either way, it should stand about $\frac{3}{64}$ in. proud of the drawer face. Note that the drawer fronts should be at least $\frac{1}{4}$ in. shorter than their openings, to accommodate the beading, top and bottom, and to allow for possible swelling. When the drawers are glued up, but before the bottoms are slid in, rabbet the drawer sides for the $\frac{3}{8}$ -in. wide cock beading with a fine-tooth circular saw, guiding the drawer against both the miter fence and the rip fence. Do all final sanding of the fronts, and prepare the top and bottom beading. Cut these full-length and then miter the ends, actually only the front half of their width, to meet the narrower cock beading on the drawer sides. To miter, clamp the cock beading between a 45° angled block of wood and a backing board. Using the wood block as a guide, cut down with a sharp chisel. Apply the top and bottom beading with glue and nails, then miter and apply the beading in the rabbets along the drawer sides.

Finishing touches—Attach the drawer stops to the drawer rails in the upper case and to the drawer runners in the lower case. To ensure a close fit for the rabbeted moldings that provide transition between the upper and lower cases, position the moldings on the bottom of the upper case and miter them to length. Then, using a strap clamp, glue up the three molding pieces using the filler strip to complete the back of the rectangle. Attach this assembly to the top of the lower case. To key the two cases, drill two $\frac{3}{8}$ -in. holes in the top of the filler strip about 4 in. from each side of the case. Use dowel centers in the holes to mark the position of corresponding holes in the back rail of the upper case when the upper case is set in position on the lower case. Separate the cases, drill the holes, and then insert 1-in. long, $\frac{3}{8}$ -in. dowels for keys (detail E, p. 35).

Rabbet the white pine planks for shiplapping and lay them horizontally in the rabbets you've cut in the back edge of the upper case sides. Space the planks $\frac{1}{16}$ in. apart, to allow for expansion, and secure them with small nails. □

Carlyle Lynch, a designer, cabinetmaker and retired teacher, lives in Broadway, Va. His plans for a Southern huntboard appeared in FWW #39, and others of his drawings are available from Garrett Wade, Lee Valley Tools Ltd., or Woodcraft Supply.