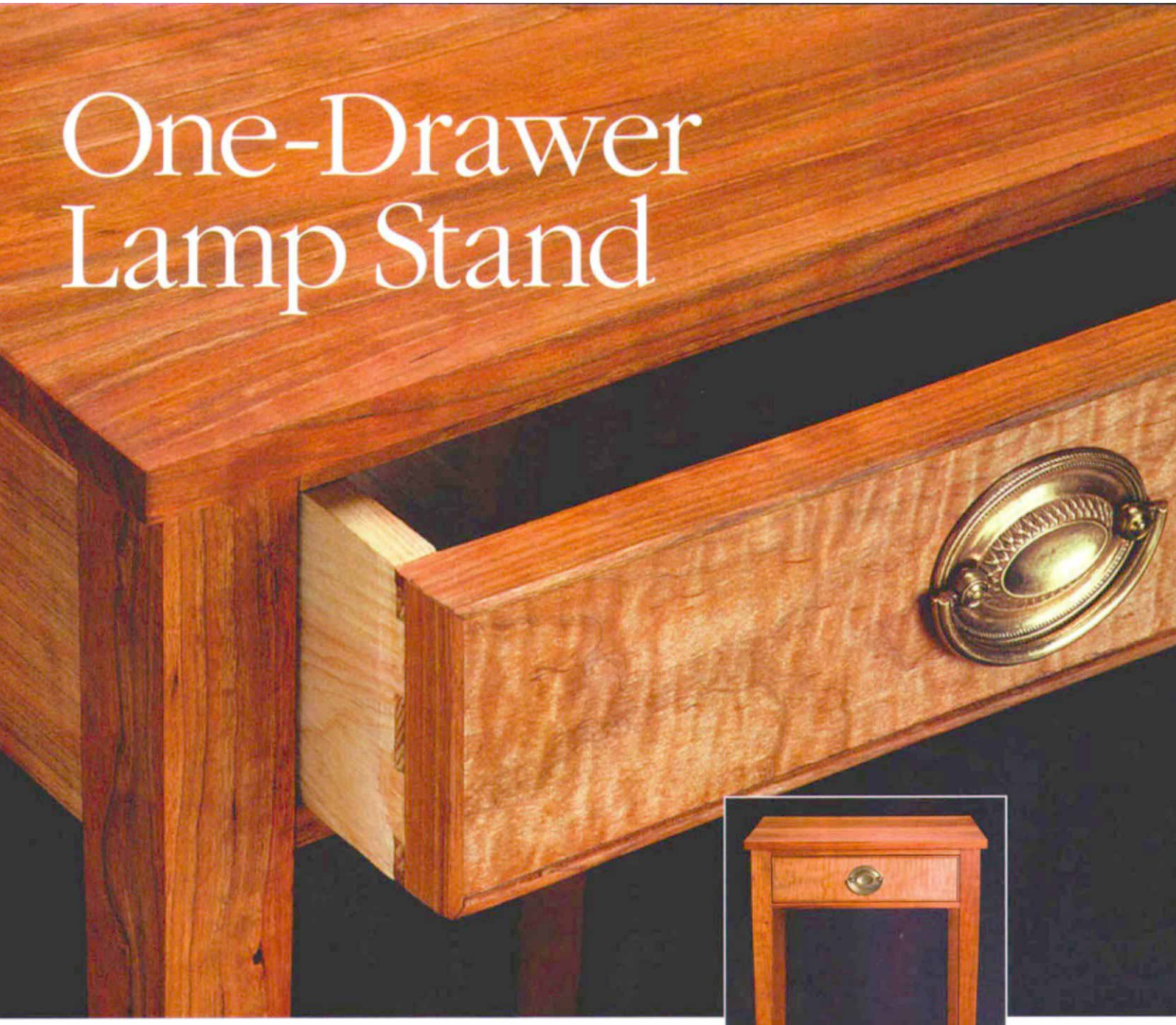
One-Drawer Lamp Stand



Build this Hepplewhite table and further hone your hand-tool skills

BY MIKE DUNBAR

This small table is a typical example of a furniture form that became popular in the 1790s and remained in favor through the first half of the 1800s. It is generally referred to by antique collectors as a lamp stand. That name distinguishes it from the tripod tables that had been popular during much of the 1700s. The name also explains this form's sudden development. Tripod stands are commonly called candle stands, from the practice of placing candlesticks on them to illuminate a room. Oil lamps became popular around 1790. But the lamps used highly combustible liquid fuel and so were more hazardous than a single candle flame.

To provide a more stable and safer resting place for oil lamps, the small, four-legged table was introduced. Outside the antique world, this form is called an end table, indicating the table's popular use at the ends of a sofa or on both sides of a bed. For this reason, many people prefer these tables in pairs. The pair I made are



Saw both corners, then connect the cuts. *Cutting through a tenon's long grain can be a problem unless you ease into it by making a diagonal cut through both corners and then connecting those cuts across the middle. Use the same process when cutting the shoulder.*

of woods native to New Hampshire—cherry with a curly maple veneer drawer front.

Making one of these tables is an excellent project to help the beginner or intermediate woodworker develop and practice hand-tool skills. It is a natural progression from the more basic joints and work methods introduced in the blanket chest I wrote about in a previous issue (see *FWW #134,* pp. 48-53). Obviously, this table could be built with straightforward machine work, but it is a lot more fun if you do at least some of the tasks by hand. You could prepare the stock with planes and handsaws, as I did when I made the blanket chest; however, for the table I did all of the thicknessing and ripping on machines. Then I moved to the bench to make the actual table. After stock preparation, the table has four major operations—the joinery, the leg taper, the top and the drawer.

Complete one operation at a time

The two most important tools you will use in making this table are the square and straightedge. Slight differences that are easy to overlook in a larger piece are magnified in a table this small. Use the straightedge and square to check everything as you progress.

After cutting all of the parts to size, remove any saw, planer and jointer marks (if you used these machines) and obtain a smooth surface with handplanes. Check to be sure that with all of your handplane work you do not plane out of square.

A mortise gauge is a scribing tool with two points and is used for laying out mortises and tenons. Adjust the two points to the width of the joint, and slide the fence to the thickness of the shoulder. Always run the gauge's fence against the outside surface on all parts. Doing so will give you a consistent reference that might not be reliable if you were to make some marks off the inside edges and some off the outside edges.

Tabletop attachment. Use a *marking gauge to mark ½ in. down from the top edge of the aprons and then use a gouge to cut pockets for the tabletop attachment* screws.

Use a square—again, always on the outside surface—to mark the ends of the mortises and the tenon shoulders. I lay out the mortises so that the rails will protrude above the tops of the legs by 1/16 in. After the table has been glued up, it is easier to true the rail-to-leg joints by planing the long grain of the rails rather than trying to plane the end grain of the top of the legs.

Notice that the tenons used to join the rails to the legs have just one shoulder (see the drawings on the facing page). In keeping with the Federal period's preference for sleek lines, the rails are flush with the legs. If the tenons were double shouldered, the outside walls of the mortises would be too. thin. While the single-shouldered tenons are not as resistant to racking, they are more than, adequate for this table. They are also easier to cut.

Backsaw the tenons and chisel out the mortises

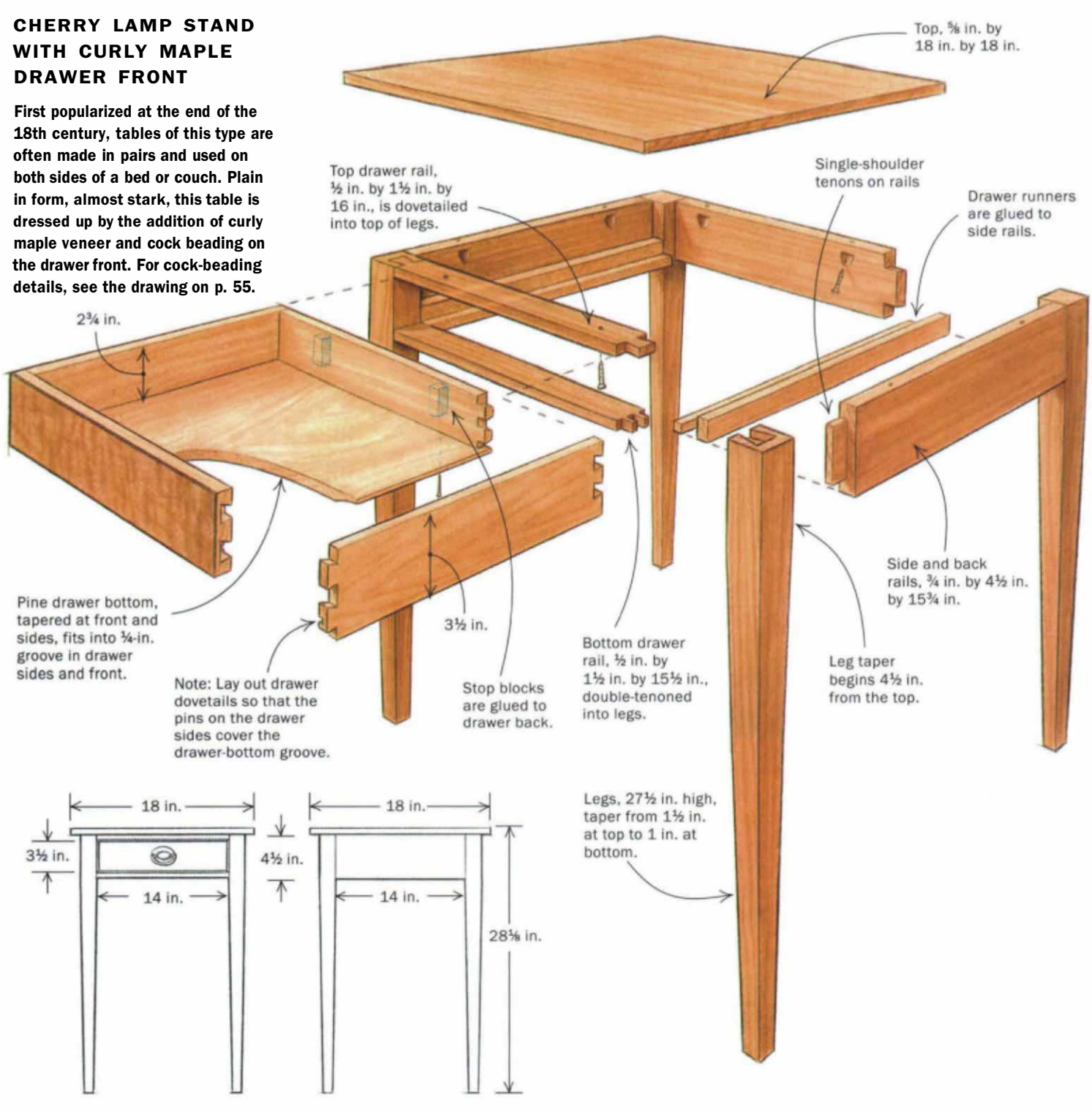
I cut tenons with a sharp backsaw (see the photos above). I prefer to cut on the outside edge of the line rather than on the line itself. This usually results in a bit of extra material. Remember the old maxim about wood being easy to remove but hard to put back on. The extra material is easy to trim away.

Start the sawing with the shoulder. Hold the part in a bench hook—an easy-to-make holding device that is very useful in handwork. You can use clamps, but they take more time. Rather than laying the saw across the part and cutting the shoulder at once, tilt the saw so that you start on one

Photos: Michael Pekovich

CHERRY LAMP STAND WITH CURLY MAPLE DRAWER FRONT

First popularized at the end of the 18th century, tables of this type are often made in pairs and used on both sides of a bed or couch. Plain in form, almost stark, this table is dressed up by the addition of curly maple veneer and cock beading on the drawer front. For cock-beading details, see the drawing on p. 55.



corner. Repeat on the other corner and then connect the cuts. Although I lay out my shoulders with a square, I cut them at a slight angle (1° or 2°) away from the tenon, which helps in obtaining a tight joint between the shoulder and the leg and eliminates a lot of work with the shoulder plane.

Cut the tenon's cheek by holding the rail upright in a vise. It is hard to keep the saw from wandering if you cut straight across the part and straight down the cheek. Once again, start the cut on one corner and deepen it on one side almost to the shoulder. Repeat on the other side. These two cuts will keep your saw straight as you complete the cheek. To separate the waste cleanly, you may have to deepen the shoulder cut to meet the cheek. Do this carefully because overcutting will weaken the tenon.

Before moving on to the leg mortises, cut the screw pockets in the inside upper edges of the rails. Use a scribe to mark the pockets' upper surfaces. With a gouge, hollow out the pockets (see the bottom photo on the facing page). Drill the screw holes at an angle that will exit through the rail's top edge.

To hold the legs while cutting the mortises, I like the two-clamp system shown in the top photos on p. 52. When I need to knock

Drawings: Bob La Pointe

Popping chips. *A stout mortise chisel is designed to be used as half cutting tool and half prybar. After driving the chisel into the wood with a mallet, you can pop the chip out of the hole. Don't try this with your bench chisels, or you might end up with a bent tool.*

A square mortise makes a square table. *When you first mortise by hand, it is important to check your work constantly. Hold a square on the table leg and sight along the square and the edge of the chisel to make sure the mortise is square to the face of the leg.*

Mortise tuning. *If need be, use a wide chisel to pare the sides of a mortise when fitting it to an already cut tenon. The author's two-clamp system holds a leg for mortising; the clamp flat on the bench is set just wider than the leg thickness, holding the leg securely but allowing it to be lifted out easily.*

out a reluctant chip from a mortise, all I have to do is loosen one clamp and pick up the leg.

A mortise chisel will make quick work of chopping a mortise. It is a stout tool designed to take a lot of pounding and levering. Make sure your chisel is sharp. Start the mortise back from the end and drive the chisel straight down. Pull it out and move about ⅜ in. down the mortise for the second cut. The chisel's wedge shape pops out a chip of wood the same width as the tool. Repeat along the mortise, stopping short of the other end.

Begin another, deeper pass along the now well-defined opening. It is important that the mortise be perpendicular to the leg. To avoid wandering to one side, check yourself with a square. Do this frequently in the beginning of the cut. You will probably discover that you tend to lean to one side or another. (I tend to push too far away and usually need to draw the handle toward me.) Very quickly you will develop the feel for vertical, and you will need to check yourself only once in a while.

During the second and subsequent passes, the chips do not easily pop out of the mortise. You have to lever them loose by pulling the chisel so that it rocks on its bezel. This pulling is the reason for stopping short of the mortise's end. The waste will keep the chisel from crushing the end. As the mortise deepens it becomes more difficult to get the chips out. They pry loose but stick in the mortise. Keep a thin chisel or screwdriver on hand to use as a pick.

Check the mortise's depth with a ruler. It speeds up the fitting if you go just a bit deeper than the tenon. Finally, use the chisel to make two cleaning cuts that bring the mortise's narrow ends up to the scribe lines.

Rotate the leg and cut the second mortise. You will find that it intersects the first. To avoid blowing out large pieces of wood from the wall of the first mortise, drive the chisel with less force as you near the full depth.

Tracing tail. *The top drawer rail locks into the top end grain of the two front legs by means of a large dovetail. The bottom drawer rail is secured to the legs with two small tenons.*

Getting the right fit

To ease the tenon's fit into its mortise, use a low-angle block plane to ease all of the edges. Where necessary, trim the mortise wall. Use a wide, sharp chisel so that you can make the cut in a single pass, which creates a more uniform surface than trimming in multiple passes with a narrower chisel. This low-angle trimming is called paring. Where necessary, trim the tenon cheek with a shoulder plane. This plane's sides are square to the sole, and its narrow mouth allows it to take very controlled cuts. It is used cross-grain.

Repeat this process of fitting and trimming as necessary. You want a snug fit that will move by hand. You should not have to drive the tenon, and it should not fall out on its own. This friction fit may take a few

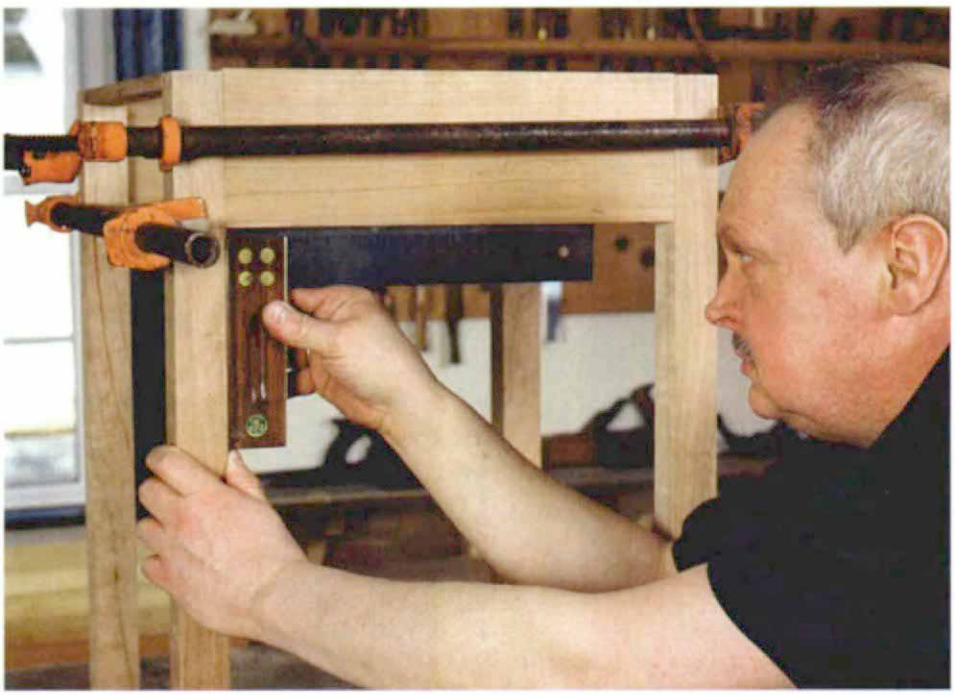
tries to achieve, but hand skills develop only with practice. However, if you do trim too much, glue a piece of veneer to the tenon and start the trimming again.

When you can push the tenon to full depth, check the result. The shoulder should be tight to the leg. At the same time check between the rail's lower edge and the leg for square. Do the same along the leg and the rail's outer surface. (This is easy to do before the legs are tapered and impossible afterward.) Make adjustments to the mortise or tenon as necessary. Use a shoulder plane to get a tight fit of the shoulder to the leg. Repeat the fitting until the table is standing on four legs. Do not be too concerned if the rail's outer surface and the leg do not align perfectly. You will plane them after glue-up. Finally, fit the bottom drawer rail.

Lay out the dovetailed tenons that secure the top drawer rail to the front legs (see the bottom photo on the facing page). Cut the tails using a hacksaw the same way you did on the rail tenons. Start on one corner and cut down the line. Repeat on the other corner. Use the tails to lay out the pins on the top of the legs and fit and test the joints. Drill and countersink two top-attachment screw holes in the rail.

Dry-fit the table and clamp lightly. Test for square (see the photos at right). Double-check by measuring from corner to corner. Place the table on a flat surface such as a tablesaw to make sure all four legs will touch. Use a straightedge across all four top edges to look for high or low spots. Use a pair of winding sticks to test front to back and side to side. Winding sticks are two straightedges usually of contrasting colors. When sighting across the winding sticks, you can make sure that all four sides are coplanar.

Ruler *and square are invaluable.* *After the joints have been cut, dry-fit the table with clamps and take diagonal measurements across the top of the frame (left). Equal diagonal measurements indicate it is square. Check the rail-to-leg joints for square while the table is clamped but before the legs are tapered (below).*



Legs are tapered with a plane

Tapering a leg is very easy to do with a plane. On the lower end of each leg measure in ¼ in. per side and connect the lines to make a square. On opposing surfaces of the leg, use a straightedge and pencil to connect the lines on the foot to the location of the rails lower edges. Use a jack plane to remove the bulk of the waste, paying attention to the grain. Finish to the lines on both sides with a smoothing plane. Rotate the leg and do the same to the other sides. Then lay out the lines for the two remaining straight sides, and repeat the process. You cannot lay out all four sides at once because you would plane away the lines for the second two tapers while making the first two.

Glue and clamp up the table. When it is dry, clamp the table in a vise and plane the leg-to-rail joints flush, as necessary. Be careful, because the grain in the two parts runs in different directions, and any overlap by the plane will leave a rough cut on one surface or the other. Make sure your smoothing plane is very sharp and well tuned. Use a very low setting. If you do nick an adjacent surface with a cross-grain cut, clean it up with a handheld scraper.

The top's long grain runs side to side

For the table's top you will probably have to glue up two or more pieces. Remember that the joint will run side to side so that you won't see end grain when looking at the table head-on. Make the top oversized and cut it to dimension when the glue is dry. The top is small, so the glue joint can be done very easily with a jointer plane. Although I did it while gluing up boards of the blanket chest, I don't recommend springing the joints for this tabletop because it is made of short, thin hardwood.

Once the glue is dry, joint and square one edge with a jointer plane. You can cut the other three sides on a tablesaw or with a fine handsaw. If you do it by hand, use a large square to lay out two edges square with the first. I had one of my medium-sized handsaws filed to a 14-point crosscut for use on thin hardwood. Using this saw, there is almost no chipping on the lower

Heating hide glue turns it to goo. *The pine drawer front is veneered with curly maple. Coat the drawer front with hot hide glue and coat both sides of the veneer, then stick the pieces together. Coating both sides of the veneer keeps the thin wood from curling.*

Don't hit with a veneer hammer. *The hammer is used more like a squeegee. After the glue-coated veneer is placed on the glue-coated drawer front, use the veneer hammer, starting in the middle and working toward the edges, to push air bubbles out from between the two layers. The hide glue sets in a few minutes.*

Flush-cutting veneer saw. *The curved, thin blade of a veneer saw has no set to its teeth, making it ideal for flush-cutting across the drawer front's veneer. The saw will leave a crisp edge on the veneer's finished side.*

edge. Measure 18 in. up these two sawn sides and lay out the final edge. Test again for square and make any final adjustments while smoothing the sawn edges with handplanes.

Use a jointer plane to remove saw marks from the two edges that are edge grain. A low-angle block plane with a very light setting will clean the end grain. You can do this with a bench plane if it is razor sharp. Be sure to plane in from both edges toward the middle to avoid chipping the corners.

Jack-plane the bottom to remove any planer marks, glue or overlap. This surface is not seen, so there is no point in spending a lot of time on it. Use a smoothing plane on the top to remove any thickness-planer marks and any overlap in the joint. Finish up with a scraper to achieve a perfect surface. I have a Stanley No. 112 scraper plane that I use to produce a glassy surface.

Place the table upside down on its top, protecting the top from damage during this process with a towel or blanket between it and the workbench. Measure to make sure you have the same amount of overhang on all four edges. Once you have the best placement, make some light marks on the top's bottom surface with a pencil, just in case something moves while you are working. Screw the top in place.

The drawer has a veneered front

The drawer front is veneered with curly maple. If exposed, the edges of the veneer would easily chip when the drawer is opened and closed. The veneer is protected with an applied raised edge called cock beading (see the drawing and photos on the facing page). This detail serves another important purpose. With flush rails, the table is sleek to the point of being stark. Cock beading makes the front three dimensional. The beading is usually the same wood as the table.

Scraper plane for drawer veneer. *After cutting the veneer flush with the drawer front, use a scraper plane to finish the veneer.*

The cock beading on the drawer ends are more narrow than those on the top and bottom. The end pieces are fit into rabbets cut across the dovetails. The tails would be weakened if the cock beading were run right up to the scribe line. Of course, the two different widths of the cock beading require the use of a stopped miter joint.

Make the drawer to fit the opening. Smooth-planing machine and saw marks and trimming the leg joints may have made very small changes to the dimensions in the drawing. I made the drawer of pine, as a New England cabinetmaker would have in the 18th century—a southern cabinetmaker would have used poplar—but you can use any suitable wood.

Thickness the wood for the drawer, the runners and the cock beading. Remove the planer marks with a smoothing plane. Then cut the parts to dimension. You can use a square to lay out these cuts, or you can use the edge of a bench hook as a guide. Glue the drawer runners to the lower inside edge of the rails. The glue will dry while you are making the other parts.

To make a drawer that slides smoothly and fits well, it is important to maintain square. For small parts use a shooting board and a well-tuned and sharp handplane. I use a Stanley No. 605 in a shooting board. Its cutter is adjusted laterally so that its edge is at a right angle to the right cheek, ensuring that it cuts a square edge. After ripping the parts to width and cross-cutting them to length, check for square. If they are not perfect, scribe a line with the striking knife where they need to be

trimmed. Place the pieces on the shooting board and use the plane to shave the end grain to the scribe line. Keep the high side toward the shooting board's stop so you do not chip the far edge.

Groove the sides and front for the drawer bottom. I did this using a plow plane, which is fast and easy. However, a plow plane is an expensive tool. If you do not have one, use your tablesaw.

When you lay out your dovetails, leave enough room above and below the tails to trim the top and bottom edges of the drawer front to accept the cock beading. Cut and fit the dovetails. When you are satisfied with the fit, run a marking gauge along the top and bottom edges of the front and plane to this line. Using the shooting board gives you good control, and because the scribed line is facing up, it is easier to see.

There are several ways to make a drawer bottom. I used the method favored by period New England cabinetmakers. They used a jack plane to feather the front edge and two sides until they were narrow enough to fit in the groove.

Use a bandsaw to cut two pieces of veneer from a piece of curly maple. That way, the grain pattern on this table and its mate will match each other. Between cuts handplane the wood so that each sheet of veneer has one smooth face for gluing. I applied the veneer with hot hide glue and a shopmade veneer hammer (see the top photos on the facing page). Brush a thin coat of glue on the drawer front and on both sides of the veneer. Place the two pieces together and push a veneer hammer from the center in all directions to remove any air and excess glue. The hide glue hardens by cooling, so the process takes mere minutes. Use the shooting board to joint the veneer flush with the top and bottom. Trim the ends with a veneer saw. This is a special curved saw with no set that allows you to cut veneer end grain flush with an edge.

Holding the drawer front in a vise, plane and scrape the veneer so it is smooth and uniform in thickness (see the bottom photo on the facing page). Glue up the drawer, and while clamping, check for square. When it is dry; test the drawer's fit.

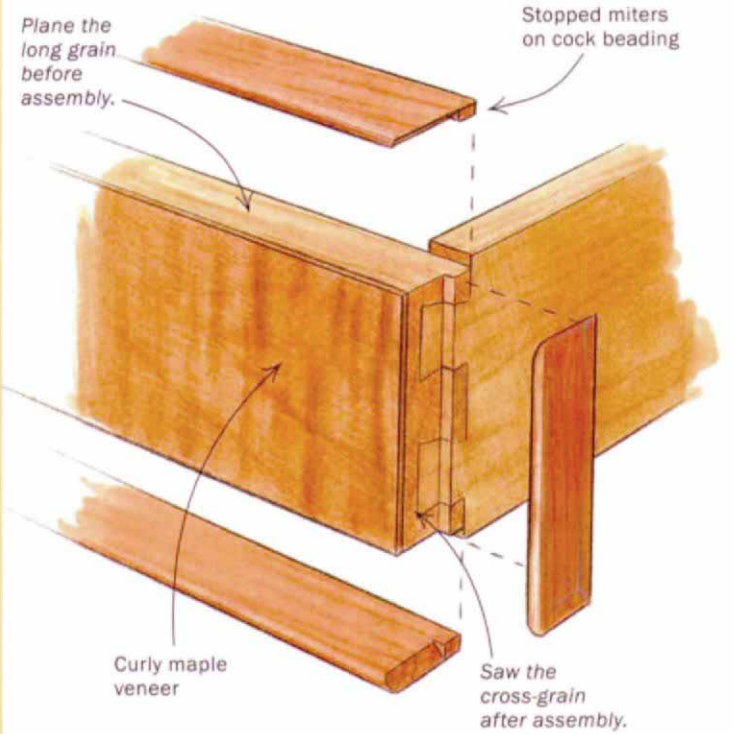
With a marking gauge, scribe the thickness of the cock beading on the ends of the drawer front and scribe its width on the dovetails. Cut this rabbet with a very sharp backsaw and clean it up with a shoulder plane. To avoid chipping the veneer, plane both edges toward the center.

Cut the top and bottom strips of cock beading to the same length as the drawer front. Using the edge of the rabbet as a guide, mark the joint's stopped miter. Stand the cock beading in a small miter box held in the bench hook and cut the miter with a very fine backsaw. Hold the top and bottom cock beading in place with clamps while you miter the two end pieces. Test their fit Round the inside edges with a block plane and glue all four pieces of beading in place. When the glue is dry, level the cock beading with a block plane, if necessary, then round the outside edge with a sanding block.

The drawer should fit in its opening so the veneer is flush with the legs and the cock beading stands proud To do this, glue two small blocks of pine to the drawer back to act as stops. Use a block plane to trim these blocks until they hold the drawer at the desired depth. The final decision is the hardware. I used a period brass oval pull. However, a turned knob would also be appropriate. □

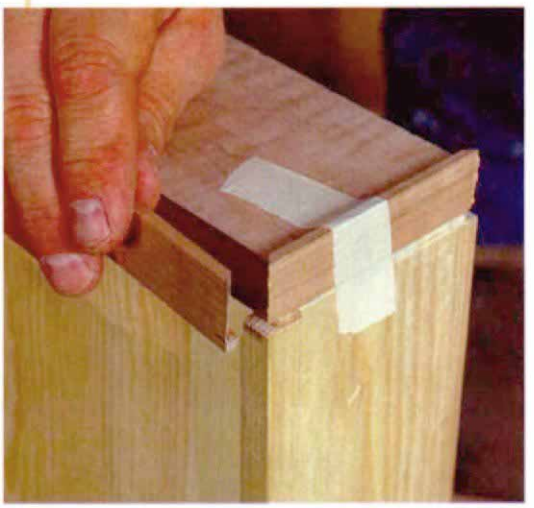
Mike Dunbaris a contributing editor.

Dressing up the drawer front



Saw a cutout for the bead strip. *All four sides of the drawer fronts must be cut back to fit the cock beading. Cut each end of the drawer with a backsaw and plane the top and bottom to size.*

Miniature miter box for cock beading. *Once the edges of the drawer front have been cut back, cut the cock beading with a backsaw and a small miter box.*



Tape clamps. *Cock beading sits proud of the veneer by* $\frac{1}{8}$ *In. Masking tape works like another set of hands to hold the cock beading in place while fitting the final pieces. After all of the pieces have been fitted, glue and clamp the cock beading in place.*