

Ball and Claw Feet

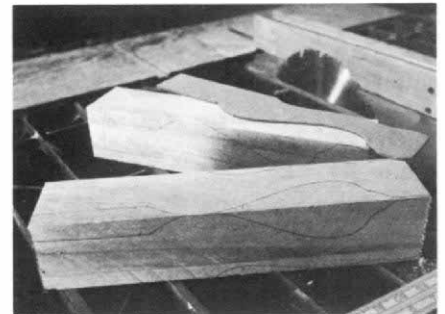
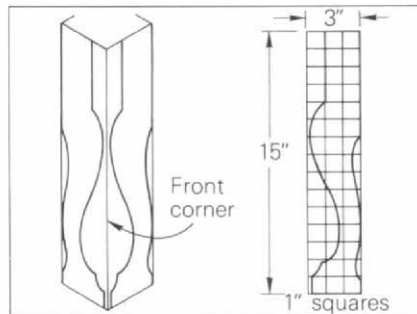
How to carve them

by A. W. Marlow

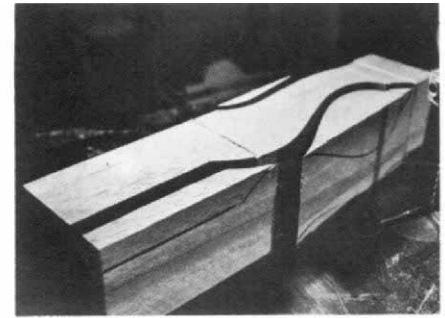
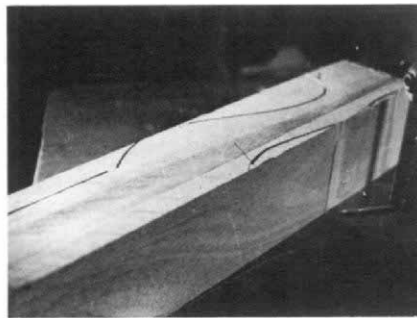
When combined with a cabriole leg, the ball and claw foot is a well-known furniture support dating back to ancient times. The industrial version is hardly recognizable—reason enough for every interested craftsman to develop his own.

Few amateurs are satisfied with their ball and claw carvings. To illustrate the process, I've chosen cabriole legs with ball and claw feet made for a wing chair. To many craftsmen, shaping cabriole legs is an uncertain process, but this step-by-step procedure should be simple to follow. The ball and claw foot on a tripod table requires the same basic carving cuts, but the claw placement is different—the claws come in over the ball horizontally for a more natural look.

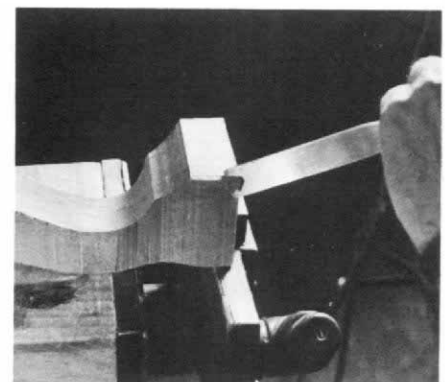
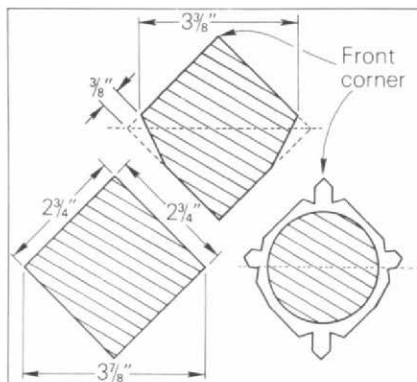
1 The average blank size for a cabriole leg, regardless of length, is $2\frac{3}{4}$ in. by $2\frac{3}{4}$ in. To make a pattern, follow the line drawing, which is laid out in 1-in. squares. Place the pattern on a blank, as shown in the drawing and the photo at right. Keep the front knee curve toward the right-angled front corner and outline in pencil.



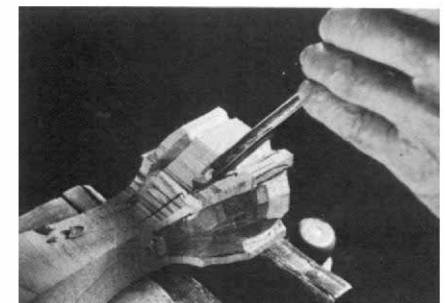
2 Shaping a cabriole leg can be quite simple when done on a band saw. Saw the first surface as shown at right, ending the cut before the waste piece is completely severed. This keeps the second or right-angled surface in place for the second cut. After the second cut has been made, turn the block back to the first surface and finish sawing the short, uncut portions of each curve.

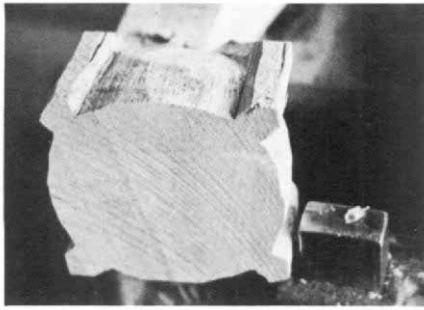


3 The next step is physically a minor one, but of major importance. Without it, the side claws look like wings sticking out. The line drawing shows three full bottom views of a leg as it is shaped. The first view shows the leg as it comes from the band saw. In the center drawing, a $\frac{3}{8}$ -in. wedge has been removed from each side claw to lessen the total width and give a more pleasing and realistic appearance to the finished foot. In the photo, a $\frac{3}{4}$ -in. #3 gouge is used to chip away the wedge of wood. The third drawing adds the contour of the ball and the veiner cuts made in the next step.

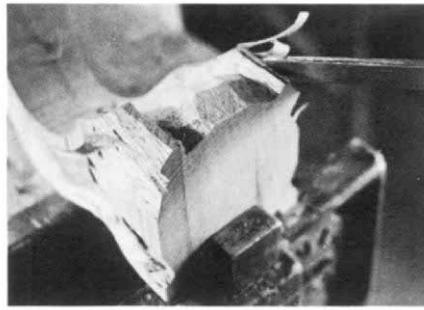


4 Now hold a pencil or ball-point pen as shown in the photo at right. Using your middle finger as a bearing against the wood, mark each side of each corner about $\frac{1}{4}$ in. in from the edge. These are the guide lines to follow when roughly positioning the claws with a $\frac{3}{8}$ -in. #41 veining tool. Continue the V-cuts into the angle area (as in the photo at far right), gradually lessening them in depth. If these feet are being cut in mahogany or walnut, you'll need a mallet to cut the rough V's.



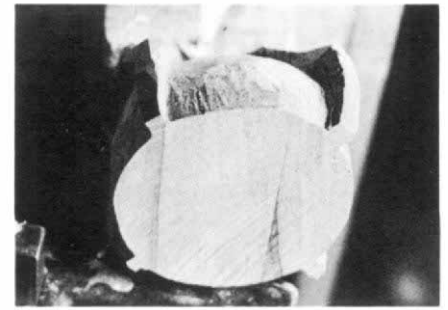


5 The next step is to shape the ball and claws. In the first photo the claws of the foot have been narrowed closer to the finished width and the ball has been cut about halfway between rough and finished condition. When cutting the ball, check frequently to see that it is reasonably round, because if any adjustment must be made, the depth of the claws must follow



the ball radius. Up to this point, the claws still retain the original band-saw outline and must be trimmed down to an average height of 1/4 in. In the center photo the #3 gouge is used to trim the claws. Front and back claws will need more trimming than the sides, and the knuckles, of course, will peak above the connecting bones.

In the last photo the ball of the foot has



been smoothed down to finished size and radius. Also, the claws are another step closer to finished shape, leaving only the work of rounding bones and knuckles. The back claw follows the ball contour until it reaches the apparent knuckle immediately above the cuticle and nail.

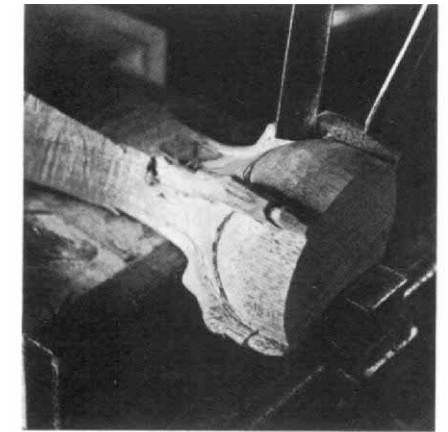
6 The foot in the photo at right shows real promise of what to expect after a little more work. Take time to carefully round the claws from the ankle down to the knuckle above the cuticle. Now check the length of the nails. This dimension is not crucial, but shoot for 1/2 in. from the bottom up to the cuticle where they will be about 1/4 in. wide by 1/4 in. high. Before forming the nail, use a medium-width #7 gouge to press cross-grain over the top for a clean-cut cuticle, shown on the extreme right. Down the sides, instead of continuing to use the #7, choose a medium-width #3 gouge and press to clean-cut the full cuticle. Reduce the nail size so the cuticle appears to overlap the nail and taper the nail to about 1/8 in. by 1/8 in. at the bottom.

Study the lower side claw in the photo. Yours should now look like this except for

the slightly rounded depression between cuticle and knuckle. That slight curve must be made carefully, first from the knuckle down, then from the cuticle upward, still using the #3 gouge.

After nail cutting, pencil in the web curve. As shown in the photo, the arc starts and ends just above the lower knuckles, although the placement is not critical. Some carvers of old felt that the web should start halfway between the knuckles.

Forming the web is a repeat performance of cuticle cutting. A #4 gouge about 1/2 in. wide should be close to the needed radius. Because of the larger area, tap the gouge with a mallet for a clean parting cut. Make tapered shaving cuts with a #3 gouge in the area of the web line to raise the web about 1/16 in. above the ball. Look at and feel the ball for any bumps that should be removed



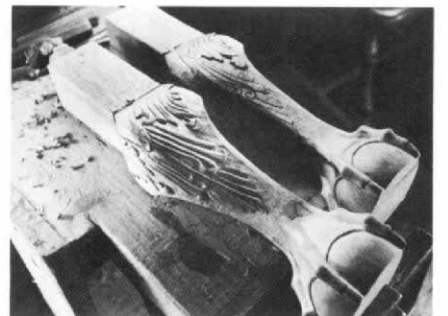
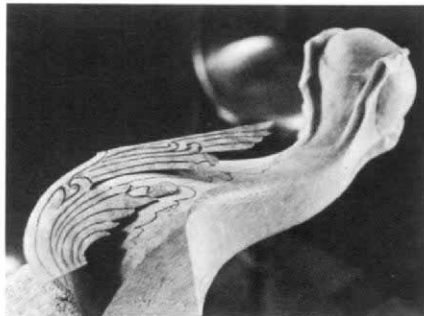
or any adjustments in contour that would improve its appearance.

7 So far, carving has ended at the ankle. Use a spokeshave to round the leg corners. Start at nothing where the curve swings into a wing block, to be attached later. Increase the radius as the tool descends, ending at the ankle in a near round. Round the high point of all knuckles.

Sanding may be done thoroughly, or slightly, leaving some tool marks. A smooth-looking job calls for a first sanding with 80-grit garnet paper followed by 120 grit. Wear rubber gloves to protect your finger tips and nails. If carving is planned for the knee, sand only to above the ankle. Should the knee be plain, sand to it now.



8 Infinitely varied foliage patterns are used on the knee for decoration. Lay flexible pattern board over the knee surface and outline the curves on the board as shown at right. Then pencil in your choice of design for carving. The photo at far right shows what to strive for. □



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