

# Carve a decorative fan

BY PHILIP C. LOWE

**C**abriole legs may give a Queen Anne lowboy its signature grace, but the fan is its visual centerpiece.

The fan, which decorates the bottom center drawer of the lowboy (see pp. 62-69), was a popular element in Queen Anne furniture. It is a fairly simple relief carving that requires a handful of gouges and chisels.

I begin with the drawer front cut to size and its edge detail shaped. To lay out the fan, draw a baseline  $1\frac{1}{4}$  in. from the bottom of the drawer front. From the center point of this line, draw a perpendicular line. Where these lines intersect, place the compass point and

draw a half-circle the radius of the fan, a second one  $\frac{1}{4}$  in. smaller, and a third circle with a  $\frac{3}{4}$ -in. radius.

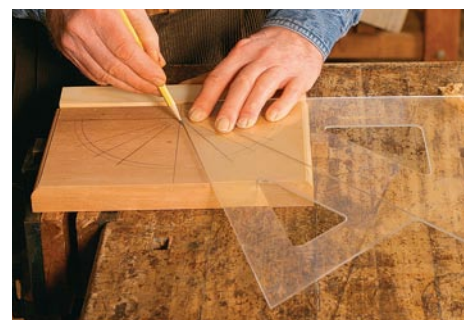
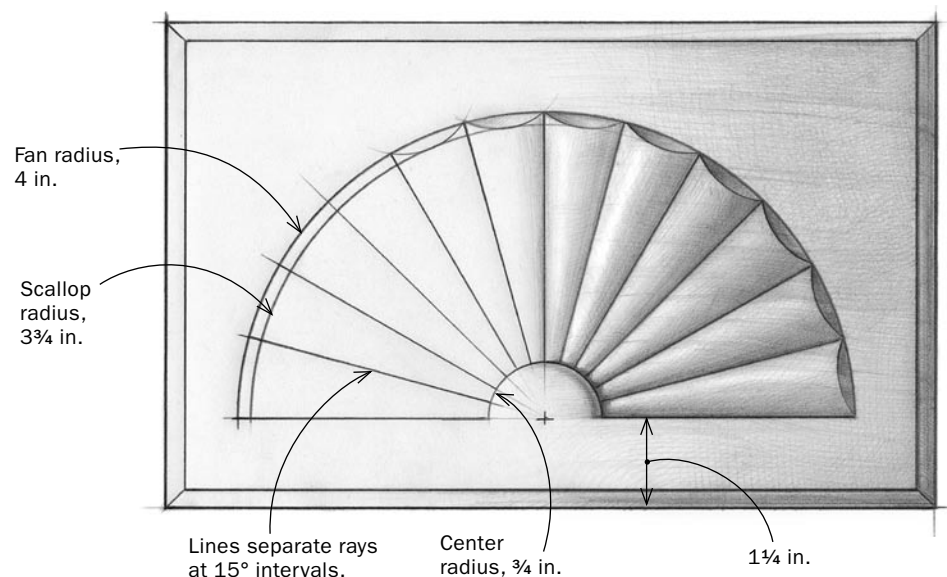
Next, divide the semicircle into 12 equal pie-slice segments. You can use a protractor to mark the  $15^\circ$  segments, or you can use  $45^\circ$  and  $30^\circ$ - $60^\circ$ - $90^\circ$  drafting triangles anchored to a straightedge held parallel to the baseline. Make certain the scribe marks extend inside the smallest circle and beyond the largest one.

## Broad strokes set the background

To begin carving, match a carving gouge to the radius of the inner hub.

## Twelve easy pieces

Geometrically, the fan is essentially a pair of nested semicircles with the larger one carved into a dozen identical slices. Each slice is  $15^\circ$  wide.



**Draw the arcs and rays.** Use a compass to mark the perimeter of the fan, the inner boundary of the scalloped edges, and the hub (top). Use  $45^\circ$  and  $30^\circ$ - $60^\circ$ - $90^\circ$  triangles in combination to lay out the rays (above).



## Establish the outline

Begin the carving by establishing its boundaries. Scribed and chiseled lines help limit the travel of gouges and other tools.

**The first cutting tool is a gauge.** Scribe the baseline on either side of the hub with a marking gauge. This creates a channel in which to register further cuts.



**Define the hub.** Use a gouge whose sweep matches the fan's inner radius. Vertical cuts about  $\frac{1}{4}$  in. deep create a stopping point for gouges when carving toward the center of the work.

Use a mallet to drive overlapping vertical cuts about  $\frac{1}{4}$  in. deep. Also deepen the baseline on either side of the hub, using a straight chisel for cuts that are shallow at the outer arc but  $\frac{1}{4}$  in. deep at the hub.

The fan's illusion of depth comes in part from the fact that the rays are recessed at the fan's hub and flush with the surface near the outer radius, so they project forward as they radiate outward. To achieve this, use a wide, flat gouge (I like a #3 or #5 sweep, 20 mm wide) to make a series of cuts from the outer area of the fan to the hub. These cuts should deepen to about  $\frac{1}{4}$  in. deep at the inner circle. This series of cuts removes most of the layout lines. But because you drew them long, you can re-establish them before moving on to define the individual rays.



**Deepen the baseline and relieve the background.** Make vertical cuts with a straight carving chisel along the baseline (left). They should slope from about  $\frac{1}{4}$  in. deep at the center to the surface at the outer radius. Use a wide, shallow gouge to carve out the background (below). The cuts should start at the surface about  $\frac{1}{2}$  in. inside the second arc.

### Define and shape the rays

Begin this task by using a V-tool to cut a sharp trench along the segment lines that separate each ray (see p. 94). Next, use a back-bent gouge to round over the tops of the rays into the trenches you just cut. When making these cuts, particularly on the center rays, you'll be working at an angle across end grain that you exposed previously with the V-tool. To prevent tearout, cut in a direction that ensures that the fibers are supported from behind. This means working in opposite directions on opposing sides of each V-groove—toward the center on the top of each ray, away from the center on the bottom. You'll likely need a second





## Shape the rays

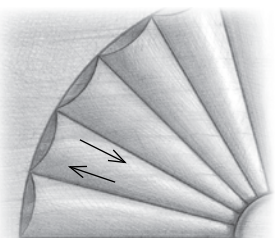
Lowe uses a variety of gouges and chisels to separate the rays so that they stand out against the background.

**Pick up your pencil again.** You erased some layout lines with the shallow gouge. You'll need them for the next step.



**Separate the rays.** Follow those newly redrawn lines with a V-shaped parting tool to furrow between the individual fan blades.

**Shaping comes next.** A back-bent gouge is ideal for rounding the beveled edges left by the parting tool. Blend the curves across the top of each ray. Avoid tearout by cutting in the right direction.



Work toward the center on the upper edge of the ray and away from the center on the lower edge.



pass to refine the shapes further and make the rays stand out in appropriate relief.

### A trick for cutting scallops

I cut the scalloped shapes around the fan's outer edge with two gouges: a specially ground #2 sweep, 25 mm wide, for the vertical outside wall of each scallop and a #5 sweep, also 25 mm wide, for the inside. Start with the outside cuts. Tap the gouge in vertically to about  $\frac{1}{8}$  in. deep. Next use the #5 to make angled paring cuts that meet the first cut at its bottom.

To make these cuts intersect cleanly, I grind a shallow convex curve onto the end of the #2, so the bottom of its cut matches the radius of the #5. In this way, the second cut neatly severs the chip and creates a semicircular bottom. With the scallops done, the carving is nearly finished.

Use the back-bent gouge to round over the edge of the inner hub to a quarter-round profile. Once this is done, continue defining and refining the lines and shapes as needed, using your eye as a guide. The tool marks can be reduced by scraping and sanding to the desired texture. □

## Cut the scallops



The rays are decorated with scalloped tips, throwing them into further relief and creating greater visual interest.

**The last course is scallops.** Lowe uses a #2 gouge with a convex tip to establish the outer walls (left). Next, he pares from the center out with a #5 gouge to finish the cut cleanly (below).

