



Bracket feet give a box new stature. These feet can be made easily and in any size.

Making Ogee Bracket Feet

Templates and jigs make neat feet for a box

by Sam Fletcher

I made a stack of Chippendale-style mirrors for our annual church sale, and I was disappointed when they didn't sell as well as I'd hoped. When the next sale rolled around, I looked for a more successful project. I had read that small jewelry boxes are very popular at craft sales, so I decided to make them my next project for our fund-raiser.

Boxes are simple, and they are easily made, even in quantity. But they can be awfully plain. I wanted to dress them up a bit. I liked the effect that feet add to the overall look of a jewelry box. Small ogee bracket feet elevate a box both figuratively and literally (see the photo on the facing page).

High-volume shops use custom tooling to make ogee bracket feet, but my method uses a standard cove (or flute) cutter and basic hand and machine tools. Although I developed this method to make miniature feet, the general procedure can be used for making larger feet as well.

Make a template and glue jig first

Decorative scrolls on the wings of these miniature feet give them a distinctive Chippendale look. To speed the layout of this scroll, I made a template from

plastic laminate and a small piece of $\frac{3}{8}$ -in. dowel (see the photos at right). The dowel registers the template in each foot blank, saving me the trouble of locating the profile each time. The template also makes the feet consistent.

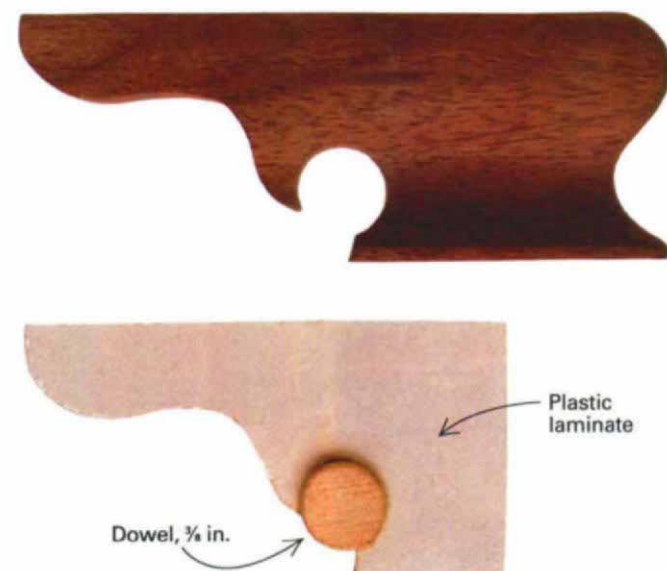
It can be tricky to glue small mitered pieces, so the simple jigs I make from 2-in.-sq., 1-in.-thick oak pieces are a great help (see the bottom photo on p. 81). I bore a $\frac{1}{4}$ -in. hole in the center of each square and cut a 90° angle out of one side. The hole permits the pieces to fit together properly and takes care of glue squeeze-out. I use a 3-in. spring clamp and a short length of $\frac{1}{4}$ -in. dowel to hold the pieces together.

Making the ogee profile

I use a board 6 in. to 8 in. wide, surfaced to 1 in. thick, for a 1-in.-high foot. The stock thickness corresponds to the height of the foot. To make feet for a box like the ones shown in the photo on the facing page, I use a board about 2 ft. long.

Using a wider board is faster because I can work on two edges at once, ripping them as I go. Having the extra width also makes machining the wood less dangerous.

I start by making the S-shaped ogee profile in the edge of the



Simplify bracket feet with a template. A scrap of plastic laminate makes a good template for laying out the decorative scroll on these feet. The dowel quickly and accurately locates the template in the blank.

stock. The ogee can be very dramatic or subtle depending on how deeply I cut the groove and the size of the radius on the top edge.

I cut a groove for the concave part of the ogee curve on my shaper. For the 1-in.-high feet that I'm making here, I use a $\frac{3}{8}$ -in. cove cutter set about $\frac{1}{8}$ in. above the table to define the

base of the foot. The fence is set so the cove is $\frac{1}{4}$ in. deep. I cut the groove on both long edges of the stock (see the top left photo on p. 80).

I complete the ogee by founding over the convex portion of the profile with a small block plane (see the top right photo on p. 80). Scrapers made from an old hacksaw blade al-



A cove cut is the first step in developing the profile. The author makes a $\frac{3}{8}$ -in. cove on both edges of a piece of stock.

low me to make any final corrections in the shape before the pieces are sanded.

Ripping the stock to width and mitering

Now I rip a piece of molding from each edge of the stock (see the bottom left photo). I set the rip fence to $\frac{5}{8}$ in., rip one side and then flip the board around and rip the other side.

The next step is to cut and miter the pieces to length. I bought my Sears tablesaw new in 1940 and have made a number of useful attachments for it. One of them is an adjustable cutoff stop that eliminates the need for marking each piece (see the bottom right photo).

To really make cutting and mitering easier, I made additional miter gauges out of $\frac{3}{8}$ -in. by $\frac{3}{4}$ -in. steel flat bar and aluminum angle. I keep one of these miter gauges set at 90° and another one set at 45° .



Round over the top edge. A block plane fairs a cove into the rounded edge at the top of the foot.



Rip the molding to width. The author cuts one edge, flips the stock around and rips the opposite edge.



With a shopmade cutoff stop, you don't have to mark each piece. Two miter gauges, set at 45° and 90° , also speed the work.



Bore the hole for the scroll profile. The hole is part of the profile and provides registration for the scroll template. A vise holds the workpiece precisely.



Mark out the scroll The dowel locates the template on the pieces. The profile is laid out on the back of each foot piece.



Cut the scroll The author uses a jigsaw to cut the scroll profile.

With these two miter gauges, I don't need to stop and reset the angle. I miter-cut one end, flip the stock end for end and then miter-cut the other end. Then, using the 90° miter gauge and the adjustable stop, I cut the piece to length, flip the stock end for end again, and cut the other piece to length. I repeat this process until I have cut enough pieces.

Lay out and cut the scroll

The scroll at the bottom edge of the foot starts with a 3/8-in. hole bored in each piece. This hole forms part of the scroll profile, but more important, it is the reference for the scroll template. Therefore, the hole must be bored accurately. To do this, I use a machinist's vise on my drill-press table and a brad-point bit.

I separate the work into right-hand and left-hand pieces and

then register one end of a piece flush with the edge of the vise jaw. To align the vise and workpiece under the bit, I place the template on the stock with the narrow end of the template flush with the square end of the workpiece.

The drill bit is lowered until it is just above the template. I position the vise so that the registration plug on the template is aligned with the bit and clamp the vise on the drill-press table. I remove the template, bore all the like-handed parts (see the photo at left above), reposition the vise and then bore the rest.

Using the scroll template, I mark out all the pieces, as shown in the center photo above. Because the face of each foot piece already has been profiled, the scroll is laid out on the back side. I use a jigsaw to cut out the scroll shape (see the photo at right above).



Clamp the parts. Gluing jigs hold the pieces at 90° and give glue squeeze-out a place to go. The dowel bridging the two pieces is temporary.

Glue jig speeds assembly

I group all the pieces into left-right assemblies, spread glue on the mitered surfaces and rub the pieces together. I clamp together the assemblies using the glue jig, dowel and spring clamp (see the bottom photo). Once

the glue has dried, I lightly sand the outside surface of each foot. I use a chainsaw file for smoothing the scroll. The feet are ready to be glued to the box.

Sam Fletcher has been making furniture and tools for 56 years. He lives in Mechanicsville. Va.