

Three Simple Moldings



You can learn to carve without spending a fortune on tools



BEAD AND ROD



EGG AND DART



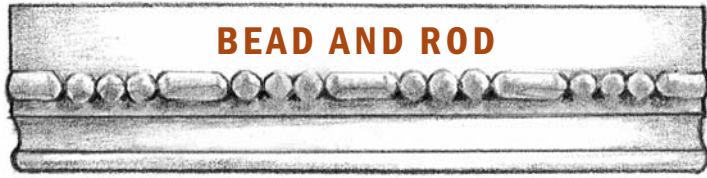
BEAD AND COWL

BY LEE GRINDINGER

If you've ever held a beveled cabinetmaker's chisel in your hands to cut a mortise for a hinge, then you have carved. It's a small step to go from cutting a mortise to carving a pattern on a molding that will embellish your next furniture project. The cutting edge is a different shape, but all of the same principles apply. Moldings are a terrific first step to learn ornamental carving because the steps are repetitive and fairly simple to execute, and the tools required are few. To make the three moldings shown above, you'll need three router bits, three gouges, a mallet and a set of slip stones to keep the cutting edges razor sharp.

Carving chisels come in a vast array of configurations that can be confusing: straight, bent, back-bent, fishtail and spoon gouges, flat chisels, parting tools and veining tools. But to get started, a few straight gouges similar in size to the ones I used here are all you need (for more on gouges, see the story on the facing page). Actually, you can carve any one of these three moldings using only two gouges.

If you're just learning to carve, look for clear lumber without varying and wild grain. Wood is easier to carve if the grain doesn't run out of the board at too steep an angle.



I've used a bead-and-rod molding on picture frames, cornices, table edges and pilasters. Also called bead and billet or berry and sausage, this molding looks good from any angle. You can carve variations of it by changing the number of beads from one to three (my favorite). I use two chisels to carve this molding: a 1/2-in. #7 gouge and a 3/8-in. #3 gouge.

Start with a 1/2-in. bead, cut with either a router or a shaper. Leave at least some shoulder on each side of the bead to set the depth of the carving. The layout should always begin at the corners or ends of a run of this molding. In a perfect world, the layout will be a repeating pattern of three beads, 1/2 in. each, and one rod, 1 1/4 in. long. If you need to fudge the layout to fit, you can change the length of the rods by as much as 1/4 in. either way, as long as all of the rods are the same size. After you've determined the length of the rods, lay out the pattern with marks along the crest of the bead using a tape measure or a rule.

With a thin-kerf saw, cut straight down to just above the shoulders at each mark. Be careful not to cut too deeply—the scars left by a saw are hard to remove. Using the #7 gouge and a mallet, cut off the uppermost corners of the beads by holding the chisel at approximately 45° to the line of the molding. This step is called *setting in*. Move along and strike the chisel to remove all of the corners at the saw kerfs, opening the space between the carved shapes. I work as many as five sets at a time, doing all of the corners on one side of the molding first, then the other side on the return run. Work the shapes until—looking straight down from above the molding—you see round shapes in profile. Use the #3 gouge to clear chips away and to make a flat ground around the beads. This step is called *grounding*. You have the outlines done. Next comes *modeling*.

Modeling is the act of shaping the objects you have set in and grounded. Use the #7 gouge and a mallet to cut directly

SHAPING



The first step in making each of the three moldings illustrated in this article is to run the stock through a shaper or a router table. Use standard bead, roundover and Roman ogee bits for each of the three moldings.

Making sense of gouges

When I'm carving, I use straight gouges more than any other kind of carving tool. The profile of the curvature of a gouge is called the sweep, or section, and it's represented by a number (usually from #1 to #11—the higher the number, the more pronounced is the curve in the blade). The width



A few tools will get the job done. The author completed all of the carving for the moldings on these pages using only these three straight gouges.

of the cutting edge is expressed in either inches or millimeters, depending upon the manufacturer. You need both the sweep and the width to describe a gouge accurately, and different manufacturers use different sizing systems.

Brand names such as Ashley Iles, Henry Taylor, Marples and Sorby are all sized according to the English Sheffield system. German and Swiss manufacturers, such as Lamp and Pfeil, use the Swiss system. Because the systems are different, gouges labeled with the same numbers will not necessarily have exactly the same sweeps. As an example, the photo at right shows three similarly sized carving gouges from three European manufacturers: Henry Taylor #4, 3/8 in., Lamp #3, 10mm, and Pfeil #3, 8mm. The curvature in the sweep of the #4 Henry Taylor gouge is closer in profile to the other two than the curvature of a #3 Henry Taylor gouge would be. But the sweeps of all three gouges, though close, are not exactly the same. Most carving chisels are hand-forged and hand-ground, so you'll find some variation even in tools from the same manufacturer.



Different brands vary slightly. The width of cutting edges and the sweep of the curves on these three European chisels vary slightly.

BEAD AND ROD

continued

across the grain to define the crest of each bead. In a series of cuts, set the chisel just past the center of each bead and give it a sweet blow with the mallet, going straight across the grain. Do this down the row, taking the same measure on all of the beads and rods before you reverse direction and cut the other sides. It's important to repeat the same strokes all the way down the sets you're working because it helps you make consistent shapes and speeds the whole process greatly. After this cross-grain cut, switch back to cutting with the grain by using the chisel in a nearly horizontal position in line with the molding. As you push the chisel, raise the handle with a slight twisting motion to pare the wood. At this point you can work each bead and rod end until it's done, moving on to the next one when the bead looks like half of a sphere. The last step is to clean up the ground with the #3 gouge.



LAYOUT

After marking pencil lines on the shaped molding using a tape measure or ruler, score the divisions between beads and rods with a dovetail saw. Take care to stop the cut just shy of the flat part of the molding.



SETTING IN

Hold a ½-in. #7 gouge at about a 45° angle and cut off the corners of all the bead and rod shapes by striking the chisel with a mallet. Work five or six sets at a time.



GROUNDING

Define the round shapes in profile from above by striking the chisel as you hold it vertically. Work your way around all sides, and then switch to a ⅜-in. #3 gouge to clear away chips around the base.



MODELING

Refine the three-dimensional shapes using the #7 gouge. Work the beads and the ends of the rods from all sides, and carve them with the chisel held at many different angles to the surface of the molding.

EGG AND DART



You can find dozens of versions of egg-and-dart molding. It's a terrific first or second molding for a cornice, and it's great for picture and door frames and on the lip of a table. I use two chisels to carve the version shown above: a 1/2-in. #6 gouge and a 3/8-in. #3 gouge.

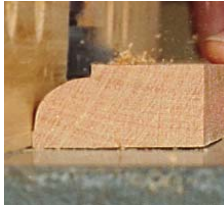
On 3/4-in. stock, start by shaping an edge with a 1/2-in. radius roundover bit and leave a 1/8-in. step on the top. To lay out the pattern, set a compass at 1 1/8 in. and mark centerlines on the top face of the molding along the length of the stock. These marks represent the center of the eggs. Set your compass at 1/2 in. and draw full arcs centered on those marks. These arcs represent the collars around the eggs. To define the eggs, set your compass at 3/8 in. and mark either side of the same center point.

The mallet work for this molding is next. Set the #6 gouge vertically on the upper part of the molding, with one corner on the 3/8-in. mark and the other corner hovering over the center at the bottom of the arc. Give the chisel a swift blow and move on to the next egg. I normally work six eggs at a time. When you reach the last egg, turn the chisel around and go the other way to cut the remaining 3/8-in. marks. Change the angle on the chisel handle and chop out a 1/8-in.-deep groove that defines the edge of each egg. After that, very lightly strike the chisel (held vertically to the molding) to score the outside of the collar. Be careful not to break the thin collar.

Put away the mallet; the rest is

handwork. Angle the chisel first left, then right, to cut the finished depth around the eggs. The chisel will leave a clean face on the collars, and you can rough out the eggs by angling the chisel from different directions. Use the same right-left series of cuts to finish the fragile collars, inside and out.

Then use the corner of the same chisel to shape the darts, taking care to make them symmetrical. Switch to the #3 gouge to remove material around the dart and the lower edge of the collar. Clean out any chips with the #6 gouge and a toothbrush.



LAYOUT

Use a compass at three different settings to complete the layout. Mark centerlines first, then use those points to scribe two arcs that define the eggs and the collars that surround them.

SETTING IN



Hold a 1/2-in. #6 gouge vertically and strike it with a mallet to outline the egg shapes first, working six at a time. Change the angle of the chisel to chop out a groove around each egg.

GROUNDING



Still using the mallet with the #6 gouge, score the outside collars; use a light touch to prevent breaking the wood. Then put the mallet away and begin to carve eggs and collars by hand.

MODELING



Refine the egg shapes by hand-carving them. Use the corner of the #6 gouge to define the darts, then switch to a 3/8-in. #3 gouge to finish them and to remove the last bits of debris.



LAYOUT

Use a compass to mark the distance between each bead, the centerline of the beads on the ogee shape and the circular profile of each bead. Mark the entire length of the molding before you begin carving.



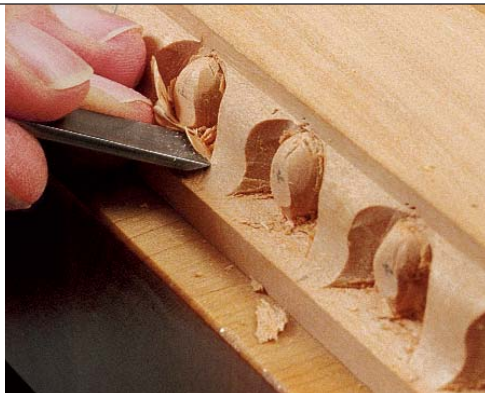
SETTING IN

Use a 1/2-in. #7 gouge and light taps with a mallet to set in the circular shape of the beads. After tracing full circles, go back over them with heavier blows of the mallet to plunge deeper into the ogee.



GROUNDING

Define the cowl's around the beads by chopping vertically with a 3/8-in. #3 gouge. Use the chisel to pare away the waste around the beads that have been shaped with the #7 gouge.



MODELING

Use the #3 gouge to carve the small valley at the crest of the ogee between each bead. Chisel into the valley from each direction using the concave side of the chisel to define the shape.



BEAD AND COWL



A bead-and-cowl molding is almost suitable when seen above eye level, such as in a cornice molding in a pediment. The shadows created by the shapes of this molding make it a real eye-catcher. I carve it with two gouges: a 1/2-in. #7 and a 3/8-in. #3.

Begin with 7/8-in.-thick stock and shape a 3/4-in. Roman ogee onto the edge. Lay out the pattern with a compass set at 1 1/4-in. intervals, and "walk" the compass the entire length of the molding. It will be easier to carve the beads if you scribe their perimeters with a compass set at 1/2 in. As you become more practiced, this mark won't be necessary. You'll be able to trace a sweet circle using only the gouge. Along the foot of the ogee, make a series of marks between the circles that define the outermost limits of the cowl. There is a little give and take in the layout of this molding, so begin from one end of a run and lay it out to the other end, fudging the space between beads, if necessary.

You can work as many as 10 beads at a time. Set in the beads with the #7 gouge, starting with the chisel centered over the scribed marks. Use light taps with a mallet and trace the full circle of each bead, then hit the mallet harder and chop deeper to about two-thirds the total depth of the bead. The finished depth is a line defined by the bottom curve of the ogee,

straight down from the top step of the ogee.

Still using the mallet, turn and strike the chisel so that the concave face removes the corners of the still-flat beads and makes



clearance for the chips as you remove the waste. Finish setting in the full depth of the beads and model them with the concave side of the #7 gouge, by hand, without using the mallet.

With the #3 gouge driven home by the mallet, cut straight down to the bottom of the ogee. The vertical lines of the cowl are perpendicular to the face of the molding, and the gouge defines the arcs in the sides of the cowl's. After cutting the sides, cut in from the front of the ogee, carving out a flat area at the transition to the flat of the molding. Carve the small valley at the crest of the ogee with the #3 gouge. Hold it straight up, set in a cut dead center on the crest, then open the cut by angling in the concave side of the chisel, rolling the chisel from a vertical to a horizontal position. Scuff the moldings with a light touch of 220-grit sandpaper prior to finishing, but don't sand so much that you remove the facets left by the chisels—those marks are the charm and proof of hand-carving. □

Lee Grindinger builds carved furniture in his shop in Livingston, Mont. (Visit his web site at www.furniturecarver.com.)

