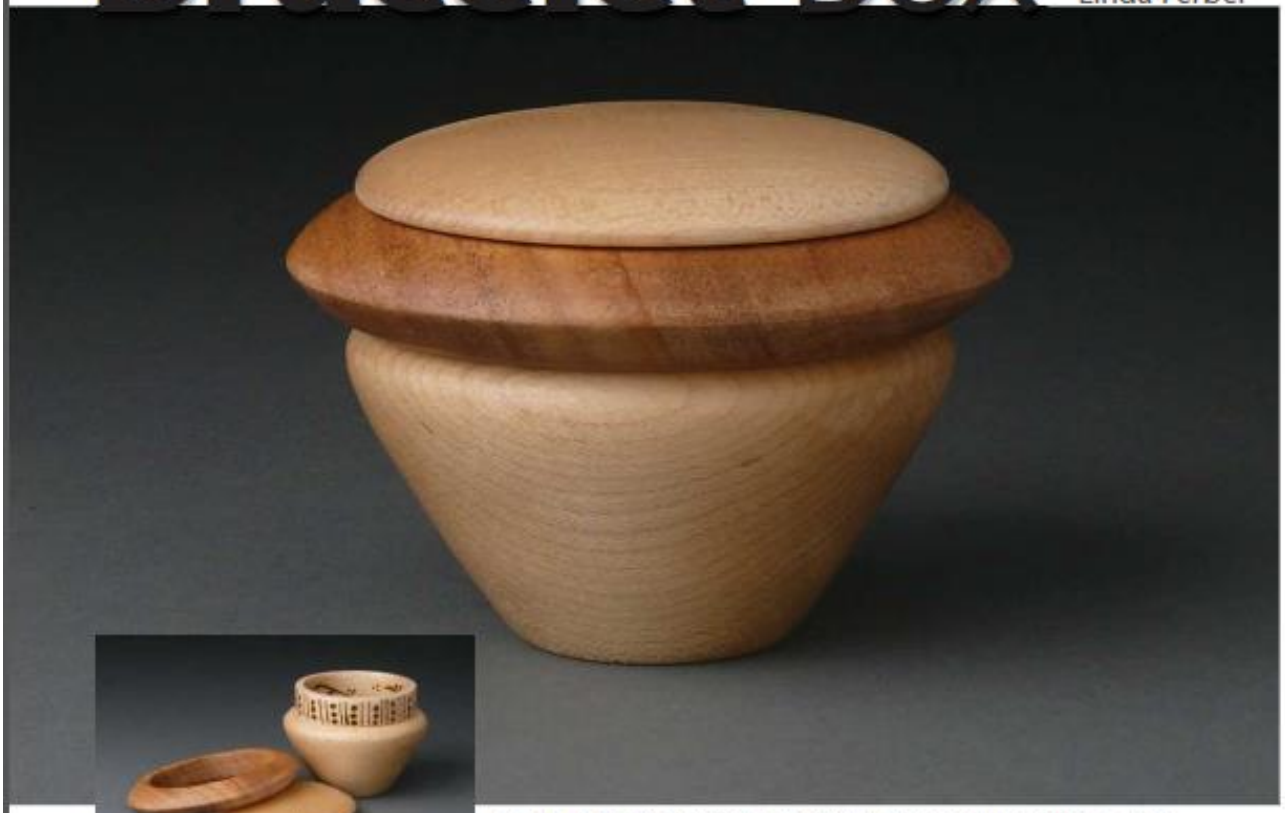
Bracelet Box

Linda Ferber



Linda Ferber, *Ginger Jar Bracelet Box,* 2010, Maple, mahogany, 4" x 2½" (10 cm x 6 cm)

When we receive packages at the AAW gallery in Saint Paul, there are always wonderful surprises inside. In one such case, the contents led me to envision a bracelet box. The story begins with a package from Molly Winton that contained decorative pins embellished with wild horses running. The pins were beautiful and left an impression on me.

I had turned a couple of bracelets and had been thinking of how I could further develop the concept of bracelets. That night I was reading the symposium handbook and when I turned to the page containing Molly's work, a completed bracelet box popped into my head. I saw the finished piece and how a bracelet and box could fit together. Of course, I also saw horses running around the bracelet, but more on that later.

This project uses basic box-turning knowledge and can be accomplished at any skill level. It is the type of project that can be used to experiment with

design. Keith Tompkins's article, "Sketch for Success" (*AW*, vol 24, no 2), offers good advice for drawing designs and it helped me with this project. I drew shapes and I looked at bracelets. Then I turned a few.

After turning the bracelet-box prototype, I refined the design so that the bracelet would be part of the box itself. Getting feedback from others was very helpful in making refinements and in making my original vision work better. Each step of the process was of value and I enjoyed learning and experimenting.

The design I created is a box that fits within a bracelet. There are three parts: the bracelet, the box, and a lid. With this concept in mind, a wide variety of designs are possible. Inside the box, additional jewelry or items such as a pin, rings, or a necklace can be safely stored.

Wood selection is part of the design process. Wood with beautiful grain patterns might not be a good choice if you are painting, carving, or burning (or perhaps wild grain might actually work in some cases). Application of ornamental turning works well with dense woods and also with a variety of alternative materials. Segmented work requires wood and materials that work well together.

After predrilling a hole with a Forstner bit, enlarge the opening of the bracelet to a predetermined diameter. Draw a circle to indicate the finished inside diameter.

Fine-tune the outside curve of the bracelet. Also, shape the edge of the bracelet so that it is flat. Doing so will allow it to fit squarely on the box.

The bracelet

For the bracelet itself, I began with glued-up, contrasting wood to make a blank 4" (10 cm) square and 2" (5 cm) thick. I prefer to turn the bracelet portion first because it is easy to use the inside diameter (ID) of the bracelet to establish the outer diameter of the box it fits over.

To determine what size bracelet you want, measure the inside diameter of a known bracelet to customize the size for a perfect fit. I suggest using a Forstner bit to drill part of the inside hole of the bracelet. This saves time and also makes it possible to mount the blank into a four-jaw chuck, expansion mode.

With the hole drilled, mount the bracelet blank into a four-jaw chuck *(Photo 1)*. Using a small gouge or a square-end scraper, remove about half the depth of the bracelet to open the hole to the desired diameter. Make sure to create a straight cut for the inside of the bracelet. Next, turn the piece around in the chuck and turn away the wood in the remaining half of the inside of the bracelet.

Having the inside of the bracelet and the outside of the box straight makes the fitting of the two a simple process.

Turn the outside of the bracelet *(Photo 2)*. The bracelet in the project photos has a gentle convex curve, but you could add beads or grooves. The thickness of the bracelet itself needs to be considered. Some people prefer a lighter-weight bracelet; others do not mind heavy jewelry.

For my glue-up, part of the wood for the bracelet is short ▸

Linda Ferber, untitled, 2010, Maple, walnut, dye, 2" x 3¼" (5 cm x 10 cm)

grain, which is not as strong as long grain—a thicker bracelet would be less likely to have the wood crack in the short-grained area. Proceed accordingly to achieve a good design and a bracelet that will not easily crack.

I turn the edges of my bracelets flat. That way, the bracelet fits squarely onto the box and matches up snugly with the underside of the lid.

Turn the piece around again and remount it into the chuck. Turn the remainder of the outside of the bracelet, blending the curve together.

Sand each section as you are turning it. Apply a finish that will be durable and wear well. I find that glossy finishes show wear unevenly, so I prefer a matte or satin finish.

The box

The size of the piece of wood for the box will depend on the ID of the finished bracelet. For this box, I used wood that was 3¾" (9.5 cm) in diameter and 4" (10 cm) long.

With the wood mounted between centers, turn it into a cylinder, establishing a tenon on each end. Measure the thickness needed for the lid *(Photo 3)* and part that off. Set the lid material aside.

Linda Ferber, untitled, 2010, Walnut, maple, ash, 3" x 3" (7.6 cm x 7.6 cm)

With the box blank mounted into the chuck, turn a shoulder at the base of the box. The bracelet will sit on this shoulder. You will have also begun to establish the sides of the box *(Photo 4)*.

Turn a recess inside the box for fitting the lid. The sides of this recess need to be square and parallel to the lathe bed; however, the top edge should be slightly slanted toward the center of the box.

Measure the ID of the bracelet and transfer that measurement to the exterior of the box. Turn the sides of the box down so that they are approximately ⅛" (3 mm) smaller in diameter *(Photo 5)* than the inside diameter of the bracelet. Take care with this measurement to ensure a pleasing fit between the box and the bracelet *(Photo 6)*.

It is important to carefully plan the height of the box so that the width of the bracelet corresponds with the height of the box. Also, make sure that the base of the box extends beyond its sides to accommodate the width of the bracelet. Paying attention to these design details will influence the overall look of the finished assembly.

Hollow out the interior of the box using your favorite box-turning tool. I find that a bedan or a square-end scraper work well. For the box I made,

Turn a cylinder for the box and lid. Establish a tenon on each end. Mark measurements for top and bottom of the box.

Hollow the inside of the box. (You are turning endgrain to make this box, so employ endgrain-turning techniques.)

Transfer the measurement from the inside diameter of the bracelet to the outside diameter of the box so that the bracelet will slide easily over the outside of the box.

Check the outside diameter of the box and the height of the bracelet in relationship to the height of the box. The space between the box and the bracelet should be about ⅛" (3 mm). For this design, the bracelet should fit in the space in between the shoulder and the lid of the box.

Make a jam chuck to remount the box onto the lathe. Turn and finish the bottom of the box.

the bottom is slightly concave and there is a crisp delineation between the sides and the bottom.

When the interior of the box is sanded, remove the box from the four-jaw chuck. Using a scrap piece of wood, turn a jam-fit chuck to remount the box, upside down. Turn and finish the bottom *(Photo 7)*.

The top

Locate the piece of wood you set aside for the top and mount it into a four-chuck. Turn a tenon the diameter required to fit inside the box, taking the measurement from the ID of the opening of the box *(Photo 8)*. Turn the inside of the lid and sand that area *(Photo 9)*.

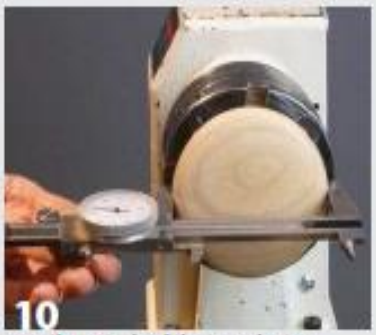
Remove the lid from the chuck, turn it around and remount it into the chuck, using the tenon you just turned. Shape the top of the lid. I made the top of my lid slightly convex.

Measure the diameter of the lid so that its size works well with the bracelet and box *(Photo 10)*. At this point it might be helpful to remove the lid from the chuck, place it on the box and bracelet, and check the proportions. Remove more wood if necessary. Sand the top of the lid. Apply finish to any areas not yet finished.

Photos by Tib Shaw.

Measure the inside diameter of the box to establish the dimension for the inside tenon on the lid.

Turn the inside of top. Create a small tenon for use in remounting the top and for fitting inside the box.



Turn the outside of the top. The top should have a loose fit; however, how it sits on the box should be pleasing.