

## Surprise Stamped Copper Earrings

Practice stamping on metal in this simple jewelry project with a twist. Use your favorite letters from a set of alphabet stamps. The surprise is in choosing letters that are meaningful to you, yet a surprise to others. Use someone's initials, or choose letters for their artistic qualities alone. Be sure to try them out on scrap metal first.



I stamped this pair of copper earrings with initials from my and my sisters' names.  
(© Paul D'Andrea)

### Materials:

- Two 1-inch to 2-inch (2.5- to 5-centimeter) diameter, 18-gauge copper discs
- Two sterling silver ear wires

Setups: Stamping, pliers, utility, cutting and piercing, and patina plus unpolished ball-peen hammer, bench block, and half-round hand file.

Follow these steps:

1. Find the letters you want to use in your stamp set, and pull them out. For good balance, use at least three.
2. Sand the copper discs using a series of wet/dry sandpapers, used dry. Start with 220 grit, then use 320, and finish with 400, making sure all sharp edges are removed and at least one surface is sanded smooth.

3. Use the circle template and a marker to mark on your discs to indicate the four quarters of the circle, like a pie.
4. Create three bands. Use the  $\frac{3}{4}$ -inch circle on the circles template to help you draw a circle, centered on the disc. Draw a second circle within that one using the  $\frac{13}{32}$ -inch opening. Draw a third circle using the  $\frac{9}{64}$ -inch opening. Repeat for the second disc. The bands will help guide your stamp placement.
5. Put on your safety goggles. Starting with the band closest to the center, stamp the first of your three chosen letters on the metal. Don't worry too much about the spacing in between each letter.
6. Go to the outside edge and stamp your next initial, which is a T in the sample project.
7. Stamp the third letter in a random pattern to fill in the middle band.
8. Drill holes in the discs about 4 millimeters from the edge using your choice of drills and a number 56 drill bit.
9. File the bur from the discs with a half-round hand file.
10. Attach ear wires to the discs.
11. Clean your discs with a drop or two of Dawn and a brass brush or green scrubbing pad.
12. Set up your liver of sulfur patina station. (You can find more information on using liver of sulfur in Chapter 10.)



Use a circles template to mark bands on the copper discs. (© Wug Laku)



Use a hammer to stamp discs with an initial. (© Wug Laku)

### ARTISAN TIP

Strike the stamp twice with the hammer for each location, rocking it slightly to make sure the stamp has made full contact with the metal. Don't lift the stamp while doing this. Refer to Chapter 9 for more stamping tips.

### ARTISAN TIP

No half-round hand file? Use a loose drill bit as a tool to remove the bur from the back of your drilled hole. Place it wherever the bur is located and twist the bit. Look for a drill bit a few sizes larger than the one you used to drill the hole.



Earrings are held on a hook before being dipped into liver of sulfur patina. (© Wug Laku)

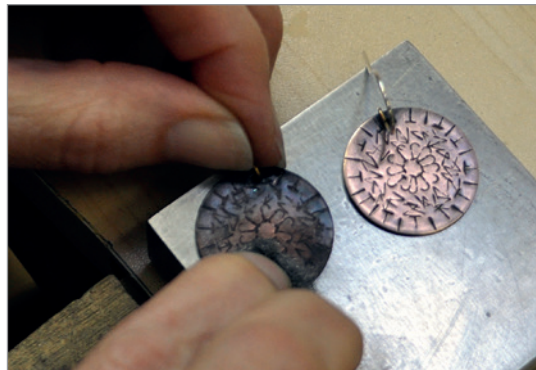


The earrings have just come out of the patina. (© Wug Laku)

13. Fashion a length of wire into a hook shape, and put the earrings on the hook, right sides facing out. Dip the earrings in the patina until you are happy with the color.
14. Neutralize the earrings, rinse them, and allow them to dry thoroughly.
15. Polish the discs using polishing paper or fine steel wool to remove some of the patina. Do this first on the back, and then on the front.
16. Apply two coats of wax using a clean, soft cloth, buffing gently yet vigorously after each coat.

### ARTISAN TIP

Check your earrings for a good match. Hang them side by side on a piece of wooden dowel rod, a marker, or a scribe held horizontally. If the earrings are uneven, make adjustments to the ear wire using your fingers. If the ear wires are too long, trim them and resmooth the sharp ends.



Use fine steel wool to fine-tune the patina on the earrings. (© Wug Laku)

## Shimmer Simple Hammered Silver Ring

Rings are arguably one of the most popular pieces of jewelry. The trick in making a hammered ring is to size it smaller than your finger measurement, because the metal stretches as it is hammered. The hammer marks in this ring project also serve as embellishments that shimmer and catch the light. Make several and stack them. This project is butane torch friendly!



This hammered silver ring is slim and comfortable. (© Paul D'Andrea)

**Materials:** 12-gauge round sterling silver wire, about 6 inches (15.25 centimeters) or enough to overlap your chosen finger with a couple of inches to spare.

**Setups:** Torch; pliers; utility; filing, sanding, and finishing; plus rawhide mallet, polished planishing hammer, ring mandrel, and twist tie.

## Measure and Cut the Ring

Follow these steps to measure and cut the ring:

1. Anneal the silver wire by heating it to a dull red glow with your torch. Allow the silver to cool to black heat, and then quench it in water.
2. Pickle the silver for five minutes, and then neutralize it, rinse it in plain water, and dry it.
3. Measure your finger by wrapping the twist tie around your knuckle and marking it where it overlaps.
4. Smooth out the twist tie. Deduct  $\frac{1}{4}$  inch (.75 centimeters) from your measurement to allow for stretching when you hammer. Don't cut the wire yet.
5. Using your fingers and a pair of flat/half-round pliers, bend the wire into a rough ring shape that crosses over itself. Push the two wires close together, so they are parallel to one another and in good contact.
6. Wrap the twist tie around the outside of the ring, and mark the metal at the overlap. Note that the thickness of the silver wire would ordinarily be taken into consideration if you were sizing a ring for a perfect fit. In this project, though, the sizing is altered during the hammering process, and hammering stops when the ring fits.
7. Slide the looped wire around a point of your bench pin so that a point of your bench pin protrudes through the opening of the ring. You might even need to cut your bench pin with your jeweler's saw to allow this to happen. The ring needs to be firmly supported by the pin in order for you easily cut it with the jeweler's saw.



Wind wire around pliers for a ring shape.  
(© Wug Laku)



Mark the wire where it overlaps.  
(© Wug Laku)

8. Holding the bottom portion of the ring firmly, place the jeweler's saw on the measurement mark you made and begin to saw. You will be sawing through two thicknesses of wire, one right after the other. The metal is thick, so take your time and go slowly. The ring will want to move around, so be sure to grip it tightly. When cutting is complete, remove the ring.
9. Sand and file the edges using the number 2 flat file and the 320-grit sandpaper. Keep the ends completely flat. They need to meet flush with no gap.
10. Adjust the ring. Taking a pair of pliers in each hand, grasp each end of the wire. Push and pull the pliers to lever the gap closed. Both ends of the wire must meet. Remove the pliers.
11. Cover the cut with jaws of the flat-nosed pliers. Squeeze down, so the ends become slightly flattened and flush. It doesn't matter if the ring is round at this point. Use your fingers in a back-and-forth motion on either side of the ring to create tension and bring the two ends close together. It is important that the wire ends meet fully, with no gaps, along the entire area of the join.
12. If there is a gap where the ends don't fully meet, place the ring on the bench pin again, and saw right down through the same cut. This action will shave off a little bit of metal from either side of the ends to create perfect contact.



Sawing wire where it overlaps.  
(© Wug Laku)

## Solder and Finish the Ring

Once you have made the ends of the silver wire meet with no gaps, you need to secure the ring seam with solder and finish off the ring with a hammer texture:

1. Prepare the ring for soldering by sanding the outside of the join using 320-grit sandpaper to clean it. Hold the ring by the edges to avoid touching the area to be soldered, and take the ring to the soldering area.
2. Holding the ring, paint flux all around the area to be joined. Set the ring on the flameproof surface.
3. Cut the solder chips. Using tweezers, place one or two solder chips on the seam of the ring. Make sure each chip of solder touches both sides of the seam, creating a bridge.
4. Light your torch, and gently heat the flameproof surface around the ring. The flux will bubble. If any of the solder chips shift, use your soldering pick to move them back into position.
5. When the flux stops bubbling, move the flame closer to the ring. Keep the flame pointed straight down, and move it opposite the join. Keep the flame moving. The flux will turn clear and the ring may glow red just before the solder flows. The solder chips slump just before they melt. When the solder melts, it “flashes” silver, and you will see a tiny silver river as the solder flows through the seam. Remove the flame as soon as you see this.
6. Allow the ring to cool until the red disappears. Then quench it in water and place it in the pickle pot.
7. Leave the ring in the pickle for five minutes, and then neutralize it and rinse and dry the ring.



Use tweezers to place solder chips on a ring. (© Wug Laku)



Keep an eye on the solder when using the torch on the silver ring. (© Wug Laku)

8. Shape the ring by placing it on a ring mandrel, using your fingers to push it down. You can hold the mandrel in your nondominant hand and use the mallet in your dominant hand to form the ring. You can also support the ring by propping it against a bench or bench pin or holding it in a vise. The sturdier the support, the deeper the hammer mark. Direct mallet blows wherever you see air between the ring band and the mandrel.
9. Hit all around the band once, and then remove the ring, flip it over, and replace it on the mandrel. Continue this process until the ring is shaped round. This flipping will help keep the size even on both sides of the ring.
10. Add the hammer texture using your ball-peen hammer. With the ring on the mandrel, begin firmly tapping the hammer on your ring, using overlapping blows. Make one full revolution, or course, of hammer blows. Flip the ring over and do another course of hammering.
11. Try the ring on for size. If it's too small, place it back on the mandrel and hammer two more courses. Continue flipping the ring over, hammering another course, and trying on the ring until you have reached your perfect fit. Your ring is ready to wear with no further polishing!



Add texture by hammering the silver ring while it is on a mandrel. (© Wug Laku)

### METAL MISHAP

Pop goes the ring! Sometimes the ring pops open at the join as soon as hammering begins. Why? This can happen if the join was dirty, or there wasn't enough solder, or the join didn't receive enough heat before oxidization set in. To resolder, gently push-pull the ring open at the join. File or sand the ends, whichever is more accessible. You can also try sawing through the ring at the join to create a clean connection. Bring the ends of the ring back together, and repeat the soldering operation.