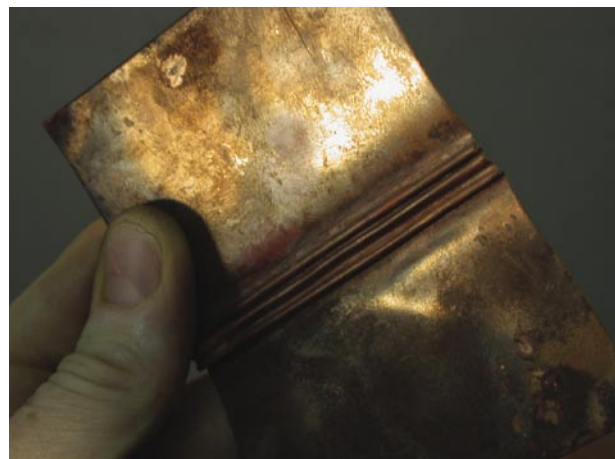




3. Drive the sides of the loop in with a hammer or a chasing tool to create the cross shape. This is a miniature version of the process shown on the preceding page.



4. When annealed and unfolded, confirm the lines by pressing them down with a planishing hammer or rolling mill. This will make the lines crisp, as with the basic line-fold. The process can be repeated to make multiple sets of lines across a sheet.



**Rauni Higson, Napkin Rings.** Sterling silver; 3 inches in diameter. Photo by the artist. These graceful pieces illustrate the use of a forged line-fold.

### Rolled-Folds

All rolled folds can be forged instead of, or in addition to, rolling. Forging followed by rolling, leaves hammer texture inside the folds and the outside smooth. Many pleated folds work well, as do a series of flattened T-folds of various types. In most cases, these folds depend on the contrast of stressing certain sections (the thick areas) against unstressed areas (the thin sections) which pass between the rollers. These two forces, one elongating and the other remaining unchanged, pull against each other. The braking effect of the unstretched area results in a curve away from the stressed side. Multiple layers in rolled-folds are what create the thickness that is stressed during rolling.

The use of a rolling mill has been mentioned previously, but only as an alternative to using a hammer. When confirming line folds, for instance, I've said you can use a hammer, a rolling mill, or a hydraulic press to flatten the metal down onto itself. This next category of folds depends on a rolling mill for the tremendous localized pressure it can achieve. The idea is easily seen with an accordion fold in a rectangular sample. When this is rolled through a mill, the folded stack is thicker than the legs, and therefore receives all the pressure. The layers of the fold will be thinned equally and simultaneously and will bend into an arc as the metal is displaced. After annealing and unfolding, the piece will reveal a dramatic form that belies its simple origins.

Rolled-folds are one of my favorite ways to introduce foldforming—I often have beginning students make a Heistad Cup as their first project. This easy project demonstrates both the plasticity of metal and the principle that multiple layers worked simultaneously, work evenly. It is also a bit magical to turn a flat square into a seamless cup in a matter of minutes.

