# Fretz Miniature Stakes



In creating his range of miniature stakes, goldsmith Bill Fretz has adapted the versatility of traditional silversmithing stakes to the production of bezels and other small shapes. Recognizing the limitations of conventional bezel mandrels, he designed his miniature stakes to provide a much greater variety of profiles so that metal can be fashioned to conform to nearly any shape gemstone.

Shaping metal on stakes to create a bezel is a process of forming the metal by

stretching. A metal piece is first bent with pliers to a shape slightly smaller than the stone and slightly thicker than the final product. As the metal part is planished on a miniature stake (or more than one stake), it begins to



conform to the shape of the stake as the metal stretches. Using a series of stakes to form metal permits the formation of an infinite variety of shapes. The Fretz line of stakes and miniature mandrels makes it easier than ever to create be-

zels, button shapes, hollow rings, and to form concave and convex hollow bracelets.

Fretz stakes are not forged, but are precision investment cast in stainless steel hardened to 38 Rc. Each tool is highly polished to a mirror-bright finish. Tool shapes can be modified by the user. Available in sets or as individual tools. Purchasing more than one stakeholder will speed your work. Made in USA.



# How To Make a **Hollow Ring**

## Step 1

Transfer a ring template that is slightly smaller than the bezel you are using to 18 ga sheet metal. The template can be made out of thick paper first and taped together to refine the shape of the ring.

## Step 2



The metal blank is bent with pliers into the shape on the left, taking care not to warp the four shortest edges. These edges are then soldered together one at a time using hard solder.

#### Step 3

The shank of the ring is trued round using a ring mandrel. The top opening (where your bezel will sit) is then formed to the desired shape (oval in this case) and planished using the R-3 Raising Stake.

#### Step 4

Using the R-3 Stake, the ring shank and sides are domed. To dome the sides, the round end of the stake is inserted into the top opening of the ring and planished gradually from the outside. As the metal stretches, it will dome up. The ring shank is then domed by forming the metal around the rounded end of the stake.

#### Step 5



The bezel is ready to be soldered into the top of the ring. It may be necessary to refine the shape and size of the top opening to accommodate the bezel. Once the bezel fits tightly, it is soldered in place. Don't forget

to drill a hole in the base of the bezel to allow gases to escape during soldering.

#### Step 6

All sample pieces provided by William Fretz.



#### Step 7

All excess material is removed by filing and the surface is finished as desired. The stone can now be set.

