

## HAMMER FORGED S-CLASP

This hand forged S-clasp has been my signature technique since I began selling my chain jewelry; fifteen years and thousands of S-clasps later, it is still my favorite design. This S-clasp is very strong due to hammer forging, and extremely secure by clever gateway design. This technique takes time and patience to master, requiring hand-eye coordination and a light hammer strike, but you will never buy inferior clasps again.

**Tools:** Flat-nose pliers; hammer; anvil; mandrel-tip pliers (3.1mm); round-nose pliers (6mm); side-cutters; flat file; and a sanding pad.

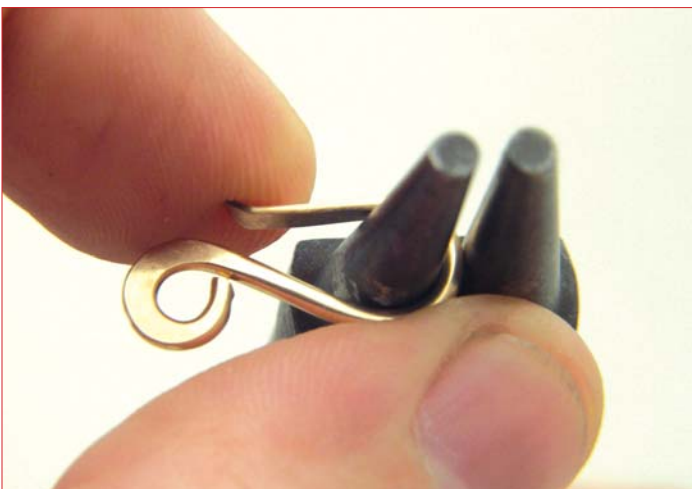
**Materials:** One 14-gauge, 1¾-inch wire length; and three 15-gauge; 5mm catch rings.



1. Use side-cutters to cut 1¾-inch (3.8cm) lengths of 14-gauge (1.6mm) wire. Notice that one end will be flat, while the opposite end will be pointed. Grip the flat end with the mandrel-tip pliers, keeping the 3.1mm jaw toward you, and bend the wire around the 3.1mm jaw in a full loop (top). Place the wire on the anvil and gently flatten just the small loop with the hammer. Notice that the small loop will open slightly when it is forged (middle). Close this gap by squeezing with the flat-nose pliers, keeping the plier's tips flat against the anvil (bottom).



2. Flatten the pointed end of the wire into a tapered tongue shape, forging about half the remaining wire length (top). Use a flat file to shape the wire's tip and sanding pad to round it smoothly (middle). Bend the tip of the flattened wire 45 degrees upward to create a 'ski tip' to serve as the catch ring's gateway (bottom).



3. Use the round-nose pliers (marked at 6mm diameter) to grip the wire halfway between the ski tip and small loop. Bend both ends of the wire toward one another equally until the bottom of the ski tip is almost touching the small loop.



4. Lay the S-clasp on the anvil and forge the remaining round wire between the two loops (top). Adjust the large loop's gateway to allow the snug passage of a 15-gauge catch ring, assembled 1+1 for bracelet length adjustability, and a third catch ring through the clasp's small loop (bottom).