



things: First, solder will flow to the warmer metal, so the solder won't attach to the setting until it's as warm as the wire. Second, because it takes more time to heat the setting, you should focus your heat on it first, and then on the wire, or you will end up melting your wire before the setting gets warm enough. One other tip to remember: Solder will flow toward the heat source. If your solder melts but doesn't flow toward the joint, you can often "tease" it to go over in the right direction by redirecting your flame from the direction you wish the solder to flow.

**8–10** Now comes your first variation. Using your roundnose pliers, bend the ends of the witch's hat inward so that the spirals meet in the middle, under the cab setting [8]. Do this as symmetrically as possible. Make sure the spirals touch the base of the cab setting and each other. You will need to add solder by the base of the setting and between the two spirals [9]. Flux, solder [10], pickle, and rinse. Remember to heat the setting first, then focus on the wires. If the solder doesn't flow correctly, use the solder pick to guide it toward the joint.

**11** After soldering the spirals together, place the teardrop between them. Add solder, and solder this piece in place [11].

**12–14** Make a  $1\frac{1}{2}$ -in. (3.8cm) witch's hat and fit it to the top point of your piece [12–14]. Flux and solder. Once the solder begins to flow, use your flame to draw it up and down the length of the witch's hat by moving the flame back and forth along the two legs of the piece. The solder will flow toward the flame and the joint between the two surfaces will look neater.

**15–18** Next, we will be doing a variation on the witch's hat where, instead of adding a separate teardrop as we did in the star, we build it into the filigree unit. Begin with the usual  $1\frac{1}{2}$ -in. strip of filigree wire, but when you bend it in half, do not crimp it in the middle. Instead, wrap it around your roundnose pliers [15]. Using your flatnose pliers, grip the two loose ends of the wire longways in the jaws of the flat pliers up to the base of the roundnose pliers [16]. When you are finished, you should end up with two parallel wires with a loop