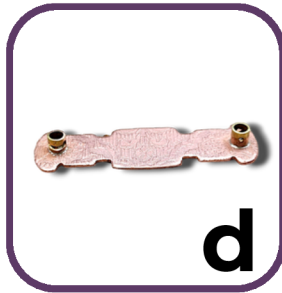
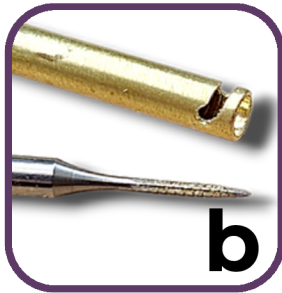


# Victorian Bar Brooch

by Annie Pennington



## Suggested Materials

- Spring-steel wire (equivalent to approx. 20g)
- Brass tubing (approx. 4mm diameter)
- Krause bur
- Drill bit
- Diamond needle files
- Sanding/polishing materials
- Jeweler's saw and blades

**1. Hinge:** Determine the thickness of your pin-stem wire, and drill a hole that's slightly larger than that straight through a piece of brass tubing (**a**). (I used approx. 4mm diameter brass tubing from a hardware store, and drilled the hole before cutting the tubing to length.) Use a jeweler's saw to cut a short piece of tubing approx. 1mm below the drilled hole. File the ends of the tubing flat.

**2. Catch:** Use a krause bur (**b**), file, or cylinder bur to carve a J-shaped (a.k.a. "smile") groove approx. 1-2mm from the end of the long tube. The groove should be slightly wider than the thickness of the pin stem. Use the saw to cut the catch from the length of tubing (**c**) and finish as in Step 1.

**3. Solder the Catch** near the left and the Hinge near the right of the brooch back (**d**). *Hinge:* The drilled hole should be oriented up and down, perpendicular to the width of the brooch. *Catch:* The catch should be placed with the "smile" curving up and facing the bottom edge of the brooch. *Both:* These components must be placed in/near the top one-third of the brooch back. This prevents the pin from tipping forward when worn.

**4.** Use flatnose pliers to make a sharp bend approx. 3mm from the end of your pin-stem wire. Insert the long end of the wire through the hole in the Hinge from the bottom of the tube (**e**).

**5.** Use your fingers or small chainnose pliers to bend the wire on the opposite side of the Hinge tube. Adjust the angle of the long end of the wire upward so that it remains elevated when the short end is in contact with the back plate (**f**). This adds tension and gives the pin its spring.

**6.** Hook the long end of the wire into the Catch (**g**) (make adjustments to the "smile" groove now, if needed).

**7.** Trim the end of the wire flush with or slightly beyond the far side of the Catch (**h**).

**DO NOT** use wire cutters to do this unless they're rated for spring steel! Use the jeweler's saw, saw halfway through the wire, then snap it off with your fingers.

**8.** Use diamond files, sanding discs, and/or other abrasives to refine the end of the wire into a long, smooth bullet shape (**i**). The end should be slightly rounded and polished so that it slides between the fibers (rather than piercing them) when worn. Finish the brooch as desired.

## Alternative Pin-back Ideas

Complex, multi-part hinge with catch pierced from back plate.



Two tie tacks

