

Figure 10.18  
Inlay with engraved recesses.  
a) raising a bead, side view, b) first cut c) second cut to insert wire, d) inserted wire hammered into place.

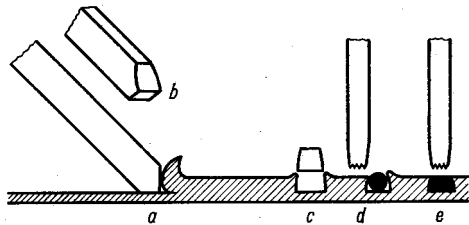


Figure 10.19  
Inlay with chiseled groove.  
a) chisel cut side view, b) chisel cut, c) chiseled groove, d) tapping down the ridge, e) hammered inlay completed.

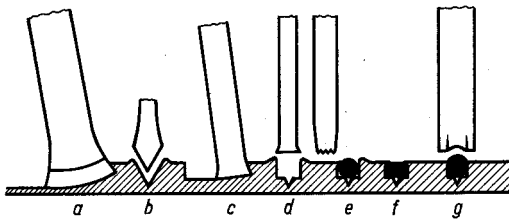


Figure 10.20  
Inlay with punched grooves.  
a) punch side view, b) incised groove, c) flat punches side view, d) enlarging the channel, e) hitting down the edge, f) finished inlaid wire, g) rounding off the inlaid wire for relief inlay.

the two first fingers and struck lightly with a small hammer. Particularly when first learning, avoid the mistake of gouging out too much at a time. Think of shaving off layers of metal until the proper depth is reached. The cavity should have smooth walls and a flat bottom and attain a uniform depth throughout.

It is usually best to first make the cavity walls straight, focusing on the correct shape for the cut. When this is achieved, use another chisel and go around the inside of the form to undercut the walls slightly. Where small wires are to be inlaid, an alternate method is to use a chisel to pull up a bur along the edge as shown in figure 10.20d.

### Using punches

This method is similar to chiseling except that no metal is removed. Because of this it is not recommended for large inlays, though it can be very efficient for small wires. Select a sharp liner that will cast up a bur on both sides of its mark. Use magnification to check the results of the too (figure 10.20b).

Follow the first cut with another punch, this one a flat-ended punch that will widen the groove to accept the inlay (figure 10.20d). Only a small amount of metal is needed to secure the wire but it must stand up above the surface as shown. It is important to select tools of the proper size and strike each blow cleanly so the tiny bur is not accidentally pressed down.

### 10.3.3 FIXING THE INLAY IN PLACE

#### Wire inlay into undercuts

Use an annealed wire that is a proper fit for the groove. A wire that is too small will not be securely held while an oversize wire risks distorting the inlay (as well as requiring tedious extra finishing). Start at one end of the groove, tapping the wire lightly into place for a short distance, than proceed to the next area. The idea, seen in figure 10.18d and e, is to press the wire outward into the swallowtail or undercut area, locking it into place. The action has the added advantage of work hardening the inlay.

Once the wire is firmly pressed into place, use a smooth-faced planishing punch to even the surface and refine the inlay. Make a series of light passes over the wire and surrounding area, feathering the surface until it is flush.

In the case of a groove cut with a chisel or punch, in which the edge of the cavity has been thrown up in a delicate bur, the process is a little different. The wire is set into position and a slightly roughened matting punch is used to gather the material immediately adjacent to the groove and press it onto the wire, figure 10.20e. A variation on this is to create a roughened punch with a slight arc in its center, shown at figure 10.20g. This tool spans the wire and presses down on the inlay to lock it in place. Once it is secure, planishing hammers, files and sandpapers are used to make the surface flush.