



May 2014 SOFA Meeting Demo: Dick Shaeffer's Wizard Bottle Opener

0. You will use a 1/2" X 1/2" square bar. Leave the Wizard on the bar for ease in working. You can use a treadle hammer or fly press to make the wizard or do it by hand. You will need a wizard block vise tool if you do it by hand. You need different punches to form the details and a 3/8 diameter spring swage to form the nose.

Here is the 3/8 spring swage: (Note how the ends are slightly rounded.)



Here are the punches that Dick uses:



(From left to right: straight punch for lines, small ball end punch for eye, larger ball end punch for eye, regular eye punch for eye.)

Here's the wizard block vise tool:



Additional tools that Dick uses for figure work: (From top: set hammer, hot cut, punch.)



Top: Arc (semi-circular) punch for round eyebrows
Bottom: straight punch for incising lines



Form the hat shape:

1. Taper the end of the bar down on four sides to form the hat.
2. Round out the edges of the tapered section to transition to the square un-tapered part of the bar.

Form the nose:

3. Use the 3/8 spring swage to pinch out the nose. Place the stock half on and half off the end of the swage. This will form a raised bridge for the nose the hollows on either side. Leave room above the nose ridge to the end of the squared off section for the eyes and eye brows.
(Note: this picture shows the fullering action but you actually have to pinch the stock with the end of the swage not the side as shown here.)



4. Form the eyes:

Place the heated stock in the wizard block in the vise. Note that this picture is just showing some stock in the vise, not the actual wizard. The tapered hat end would up over the top edge and the face where you are punching would be against the block. Be careful, the block and vise will get hot. You should wear gloves while doing this punch work. Dick uses a small vise grip to hold the smaller punches and uses a softened ball peen to hit them.



Use the small ball end punch to start the eyes $\frac{3}{32}$ in from the edges of the bar and getting them centered even to each other (unless you want a silly or drunk wizard!) Then use the large ball end punch to enlarge the eye sockets. You can fix a minor imperfection if you did not get the first ones even. (I don't think you see any evidence of the first punch it just allows you to get the eyes lined up correctly. The second punch obliterates it.) Then use the standard eye punch to complete the eyes and give them a pupil.



(Note that the last picture shows a few steps we have not done yet! And it has a variation: straight eye brows rather than the curved ones. Another variation is to create arched upside-down V shaped eyebrows. All these options allow you to create wizards that express different emotions and states.)

Curl the hat and incise the star

5. Curl the tapered end of the hat as in the last picture. Then use the wizard block and a straight chisel to incise the star or some other ornamental design on the hat. (The star is two lines to form an X with a third vertical line through the intersection.)

Make the Beard

6. Use the wizard block vise tool. Take a set hammer or flat fuller chisel to lower the area below the nose and give it a beak. Be careful to place the piece nose up in the fire so it won't be burnt off! Then use a sharp hot cut to create the vertical lines for the hair of the beard and lightly cross-hatch them.

Cut the mustache with a hot cut or sharp chisel from the center below the nose 1/8 deep. In this version the mustache is not cut free just incised but you can cut and curl it away from the face. Be sure to address any sharp points so they don't barb the user! Under cut the beard.



Now make the Bottle Opener

7. Cut the wizard off from the bar leaving 1 1/2 - 2 in below the beard. You can grip the hat with 3/8 tongs for the remaining forging of the bottle opener. Flatten out the end and slit and dimple. Punch from the back, flip, and knock out the plug from the face. Now drift the hole to 1in so you can work it on the tip of the horn to straighten and open the hole. Relieve the edges with a peen and punch the tab. Finish with Johnson's paste wax.

