Ensnared PendantBy Valorie Clifton

This pendant is my take on the string art jewelry that I grew up seeing in the 70s. This is a wonderful and visually exciting way to secure a stone without the use of solder. Though much of the stone is covered, it is visible through the wire work. This technique can be adapted to different sizes and shapes of backplates and stones.

I frequently like to design "on the fly". Sometimes I'll make spontaneous changes in the middle of the creation of a piece. Halfway through making this pendant, I decided to double the number of holes around the edge in order to create a denser webbing effect.



Materials List

- 26 gauge copper wire, dead soft temper
- 22 gauge red brass or copper. I used red brass.
- 1- 25mm x 35mm *or smaller* cabochon. I used a handmade, porcelain cabochon.

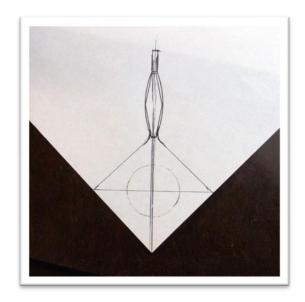
Tool List – Don't forget Safety Glasses!

- Jeweler's saw and blades, size 2/0 or 3/0
- Bench pin
- Torch and soldering pad for annealing
- Ruler, pencil and paper
- Large, flat jeweler's file with fine teeth
- Half round needle file
- Sandpaper or sanding sponges, medium and fine grits
- Polishing supplies
- Safety glasses and particulate mask
- Bench block or anvil
- Liver of sulfur (optional)
- WUBBERS Large Oval Mandrel Pliers
- WUBBERS Medium Round Mandrel Pliers
- WUBBERS Artisan's Mark Sharp Texture Hammer
- 1.5mm hole punching pliers or a small drill
- Awl and a hammer for striking the awl.

Step 1

I find it useful to draw paper patterns prior to cutting metal. Mistakes are always better if made on paper!

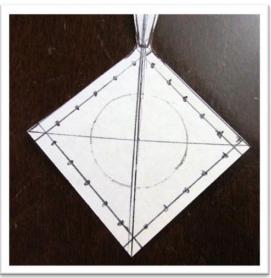
For this design, I chose to create a 1 ½ inch square pendant with an attached bail. For the bail, I drew an oval (1 ¼ inches long x 3/8 inch wide) that was connected to the square, slightly overlapping. Next, I drew a tiny, thin tab (3mm wide by ½ inch long) on top of the oval. The tab is for a little curl decoration; while it isn't required, I like the effect. The circle in the center was just my doodling. I toyed with the idea of using a circular stone.



Step 2

Cut out the paper pattern. I decided to mark my dots for the holes in the back plate. I drew lines 1/8 inch in from the outer edges and marked dots in ¼ inch increments along the lines.

Later in the design, I decided to add dots in between these, so add dots in **1/8 inch increments** including the corners. You should end up with 11 dots along each side. Now is a good time to go ahead and mark all the dots.



Step 3

Trace the pattern onto your 22 gauge brass or copper. Cut the shape with a jeweler's saw for best results.

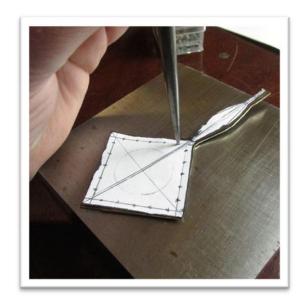
Metal shears won't do a great job with the rounded portions of this design, and they leave marks on the rear side of the metal.



Step 4

After cutting the shape out, smooth any rough edges and burs using the files and sandpaper. A flex shaft fitted with a sanding disc can also be used, if desired. You want a really smooth edge, so take your time and make it pretty.

Place the pattern over the metal with double stick tape or a glue stick (or just hold it down). On a bench block, using an awl or a punch and a hammer, mark each dot through the paper, transferring the marks to the metal below.

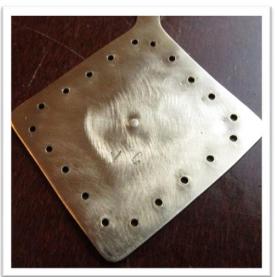


Step 5

Using the hole punching pliers or a drill, create the holes in the back plate (*remember*, you should have 11 holes along each side, unlike the photo).

This is also a good time to add a maker's mark, if desired, to the *back* of the piece.

File the burs from the holes and sand the front and back smooth.



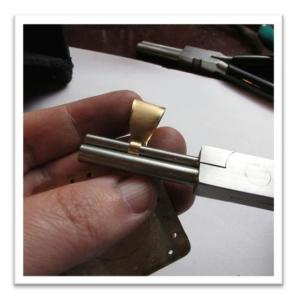
Step 6

Using the larger jaw of the WUBBERS Large Oval Mandrel Pliers, grip the bail portion (the oval portion) in the center. Bend the metal forward around the pliers until an oval shaped bail is formed. The oval bail should reach around to the *front* of the pendant and touch the back plate. Slightly bend the entire bail backward until you've achieved the desired look. See the following few photos for guidance.



Step 7

Using the small jaw of the WUBBERS Medium Round Mandrel Pliers, grasp the tab and curl it upward to make a little curlicue. Center it as needed by wiggling it back and forth until it looks nice.



Step 8



Here is a sideways view. Note the small backward bend in the base of the bail in this photo. If needed, push the bail closed using your fingers until it looks like the photo.



This is what we should have at this point.



Here is where I decided to add extra holes (to total 11 per side).

Step 9

I decided I wanted to texture the bail and back plate. Slip the WUBBERS Large Oval Mandrel Pliers into the bail for support.



Using the bench block and the pliers as support, gently texture the piece using the WUBBERS Artisan's Mark Sharp Texture Hammer. (*the entire piece could be textured prior to forming the bail, but I didn't decide to texture until this step.*) Proceed to texture the entire front surface, if desired. I left the curlicue element un-textured for contrast.



This is what you should have after texturing. I annealed the pendant at this point using the torch and soldering pad.

Step 10

Using the bench block and WUBBERS Artisan's Mark Sharp Texture Hammer, gently hammer along the edges of the bail and pendant to thicken and texture the edges. This is sometimes referred to as "upsetting" the edges.



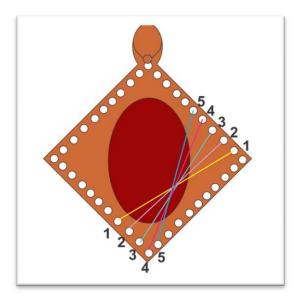
Step 11

It's time to wrap the pendant! Before we begin with the wire, however, make sure to **polish the metal back plate**. You won't be able to polish it very well once the wire is added.

Hold the cabochon firmly in the center of the pendant. A little bit of double stick tape can help to hold it, if needed.

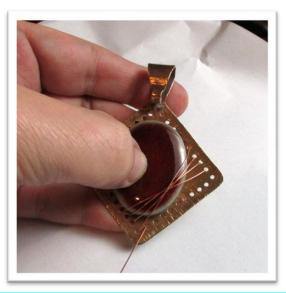
Cut a generous length of 26 gauge copper wire. Beginning from the back of the pendant, start at any place and thread the wire through to the front, leaving a short tail; hold the tail while wrapping the wire.

I chose to begin 4 holes from the bottom corner, pulling the wire across the pendant, making sure the wire crossed the bottom edge of the cabochon. Thread the wire through the hole indicated by the diagram (1 hole from the opposite corner) to the back side.



This pattern can be adjusted depending on the shape of the stone used; the wire can be begun at any place on the pendant -- the important thing is the technique shown.

Step 12

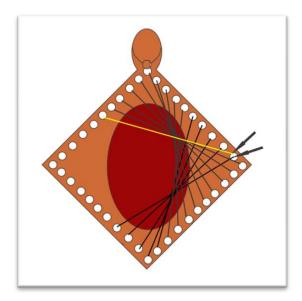


It is important to work "softly" with the length of wire, only pulling on a short length of wire closest to the work in order to avoid work hardening the wire. Avoid sharp kinks and bends and avoid scraping the wire along the potentially sharp sides of the holes.

Bring the wire along the back side, pulling firmly, making sure the wire in front is straight. If needed, the front wire can be gently straightened using nylon jaw pliers.

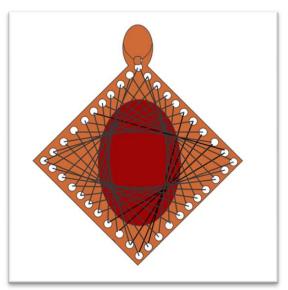
Bring the wire up, from the back side, through the hole adjacent to the starting point, 3 holes from the corner. Pull snugly, but not so snug as to snap the wire.

Cross the wire over the prior wire in an elongated "X", threading it though the adjacent hole on the opposite side (in the 2^{nd} hole from the corner) to the back side of the pendant.



Continue in this manner, entering the next hole down the line and crossing over the pendant, as shown in the illustrations, always coming up in the adjacent hole on one side and going down in the adjacent hole across the pendant. Pull snugly with each pass, taking care not to kink the wire.

Eventually, you will round the corner on your way around the pendant, coming up through a previously used hole. Note the diagram arrows, showing a hole with two wires. This is good and necessary.

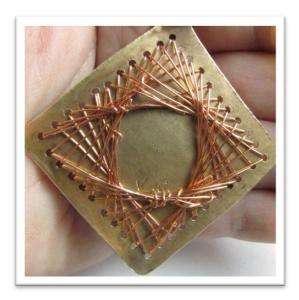


Continue around the pendant, stopping when every hole has two wires- 1 entering and 1 exiting. At that point, your pendant will look like this final diagram.

Different shaped backplates will result in different results with the wire. Experimentation will yield beautiful results. Don't limit yourself to only one style and shape.



This is what we have so far.



On the back side, gently weave in the beginning and tail wires by burying them in the pre-existing wire. Wrap the ends securely within the weave, taking care to be neat (neater than me) and taking care not to leave sharp wires sticking out to scratch the wearer.



This is our final product, all polished and pretty. Copper and brass tarnish over time. If desired, you can gently polish the high points, leaving the inner portions of the pendant darker for a nice effect. If you wish to darken this pendant sooner, use Liver of Sulfur or other patina methods to darken the pendant. Polish as desired and the pendant is ready to wear!

Review Questions

- 1) This pendant will look the same, no matter the shape of the stone or back plate.
 - a) True
 - b) False
- 2) Mistakes are better made on paper than on metal.
 - a) True
 - b) False
- 3) What is a good rule of thumb when working with long lengths of wire?
 - a) Avoid sharp kinks and bends.
 - b) Work "softly" with the wire, only pulling on a short length of wire closest to the work.
 - c) Avoid scraping the wire against potentially sharp edges.
 - d) All of the above
- 4) It is important to avoid having two wires in any hole in the pendant.
 - a) True
 - b) False
- 5) The wires are meant to cross each other, in an elongated "X" from one side of the pendant to the opposite side.
 - a) True
 - b) False