

## Flower Pendant

By Jurgen J. Maerz

This beautiful pendant is an intermediate–advanced project and requires sawing and soldering skills. Polishing and setting skills are assumed.

There are several difficulties in soldering especially during the initial construction. I will share some bench tricks to make this project simpler.



### Materials List

- 1x1" 16 gauge Sterling sheet
- 2x3" 22 gauge Sterling Silver Sheet
- 4" 1x2mm rectangular Sterling Silver Wire
- Silver Solder medium, Silver Solder hard
- 1/2x 1" 24 gauge 14K YG sheet
- 14KY medium solder
- 1" 1x1.5mm 14K YG wire
- 1 fancy shaped green Amethyst (can be any stone of your choice)

### Tool List

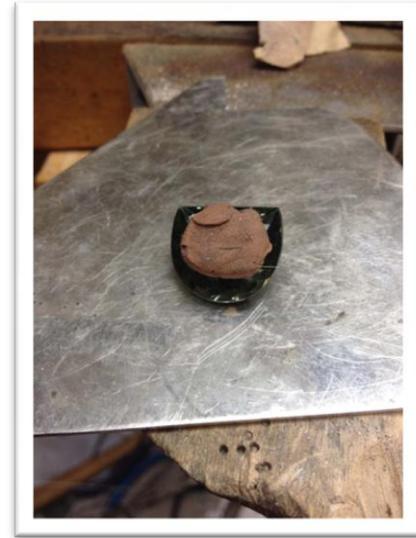
A fully equipped workbench with :

- Flex-shaft
- Jewelers saw with 3/0 blade
- Dividers
- Files and sanding sticks
- Needle files
- Soldering torch and set up
- Scribe
- Heatless Mizzy Wheel
- Quality stamp and maker's stamp
- Safety glasses
- Liver of sulfur
- Polishing equipment
- Chasing hammer
- Custom or commercial punch
- WUBBERS Classic Round Nose Pliers
- WUBBERS Medium Oval Mandrel Pliers
- Modeling clay
- Black magic marker (Sharpie)
- Drill bit--1mm

## Making the Bezel

### Step 1

To begin, use the modeling clay to attach the stone face down onto the 16 gauge sheet. This will allow the tracing of the outline of the stone.

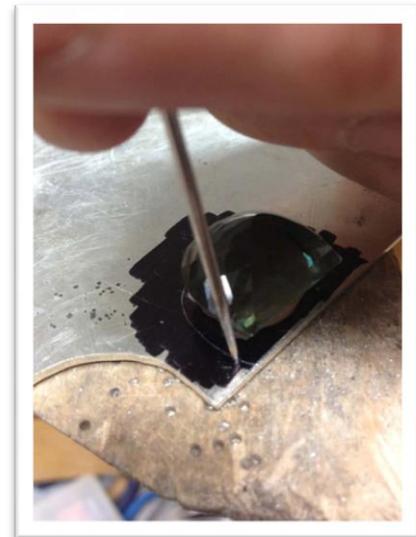


### Step 2

Bench trick:

Use a magic marker to create a black surface where the tracing is being done. This will make the line more visible and makes the piercing easier.

Use a scribe to trace around the stone.



### Step 3

Pierce the outline of the stone from the 16 gauge silver sheet. (We are using a larger sheet only because it was available. The size needed in materials is 1x1")

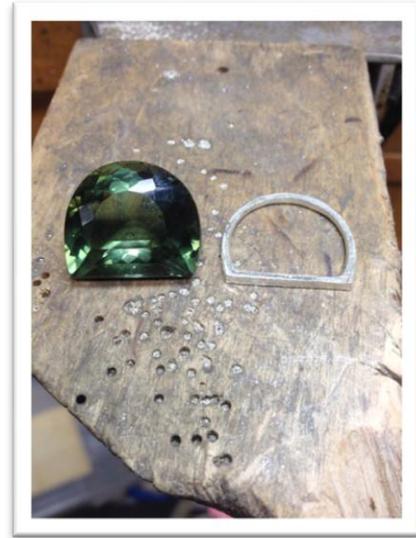


#### Step 4

Drill the resulting shape, trace a rim of about 2mm all the way around, and pierce it as well. This will result in a frame where the stone will sit in later stages.

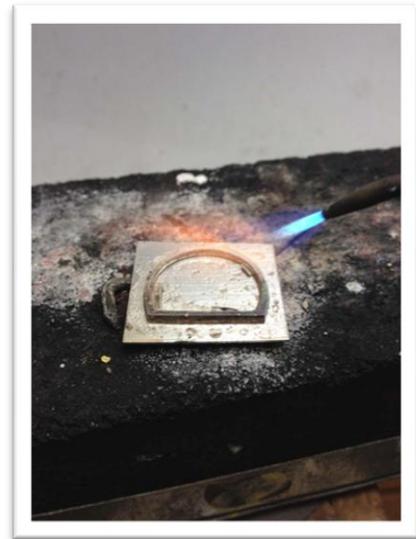
Bench trick:

Pierce the smaller shape first and then cut the outside. This will simplify this step.



#### Step 5

Solder the frame to a sheet of 24 gauge silver.



#### Step 6

Cut the outline, leaving a 5 mm rim for decorating. Use a decorative punch (shape depicted) and punch in the design all the way around. This is done using a chasing hammer. Use a file to remove the scalloping that is created by the punch around the outer edge. A smooth line is needed for the next step.



### Step 7

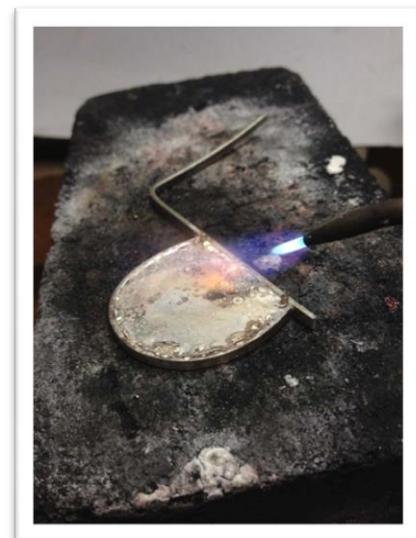
Flip the piece over and use the rectangular wire to make a frame around the assembly.

Bench trick: Using Wubbers Medium Oval Mandrel Pliers, create a horse shoe like frame first, solder it in position and remove the excess wire from each side



### Step 8

Now solder the rectangular wire across the straight side. This is saving a lot of time and effort. Remove the excess wire using a jewelry saw.



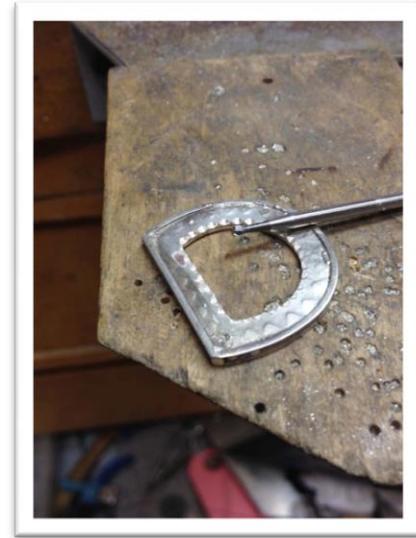
### Step 9

Drill a hole for piercing. Using the jewelers saw, cut out the center of the assembly. Remove any uneven lines using a file.



### Step 10

Using a ball burr, decorate the back of the assembly. This will add character to the piece, as everyone looking at it will turn it over. Jewelry should look great from any viewing angle.



### Step 11

When placed on top of the assembly, the stone should sit nicely and upon looking straight down, very little metal should show.



### Making the Back Plate

#### Step 12

Bench trick:

Fold a heavy stock paper in half and cut out the shield shape. When unfolding and the shape is satisfactory, trace that shape on the sheet metal and cut it out with the jewelers saw.

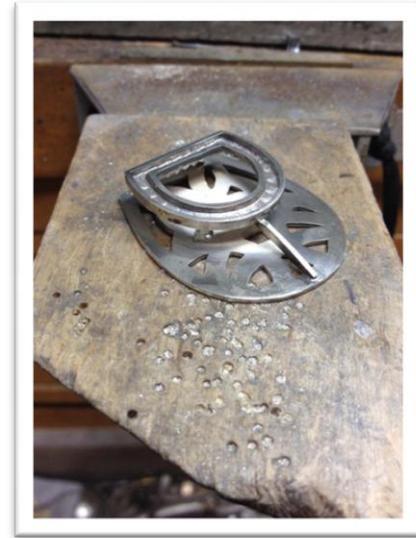
Quality mark and put your maker's mark on the back plate and inscribe a geometric design. This is then cut out using the jeweler's saw.



### Step 13

Using some of the flat wire stock that was previously used for the rim, create a piece and solder it to the base and the bezel. This will elevate the bezel.

Create two flower stems from wire, and solder them to the base and the bezel as well.



### Step 14

Make a bow using the same flat stock and solder it to the back. Be sure the bezel is level and attach it to the top of the bow with medium silver solder.

Place a small piece of the 14K 24 gauge sheet and solder it to the top of the inside rim in front of the bezel. This will later hold the stone .

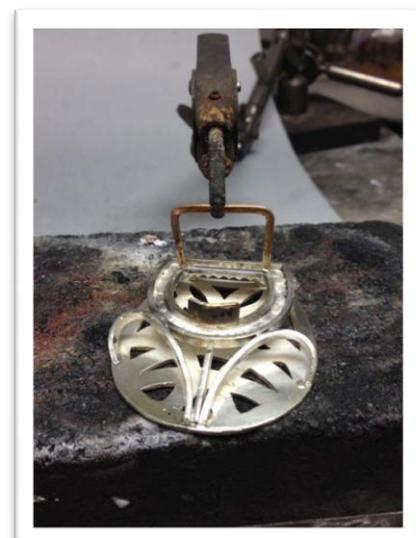


### Step 15

Solder the two prongs.

Bench trick:

By making a u-shaped wire, both prongs can be soldered to the bezel at the same time. The excess wire will be cut off.



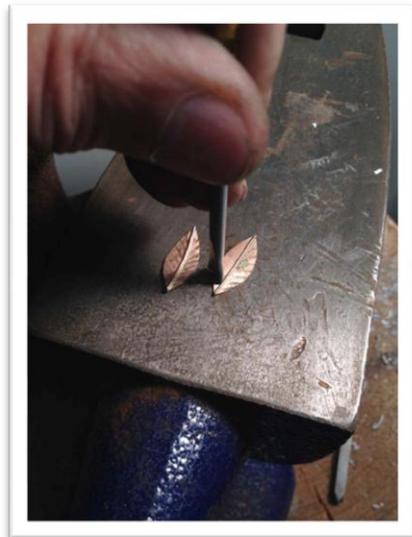
### Step 16

Using the 24 Gauge 14K sheet, make two leaves. Using 14K medium solder, solder the gold wire along the center of the leaf.



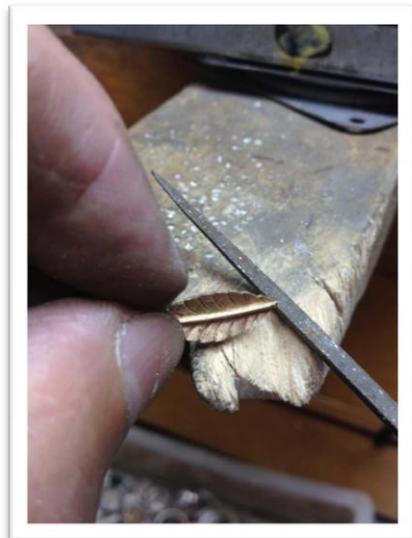
### Step 17

Design and decorate the leaves using a decorative punch.



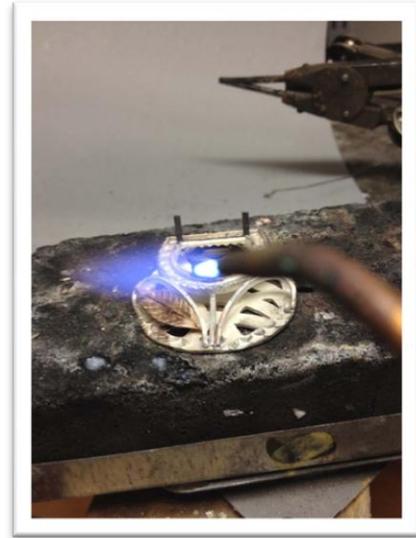
### Step 18

File more decoration into the leaves using a needle file.



### Step 19

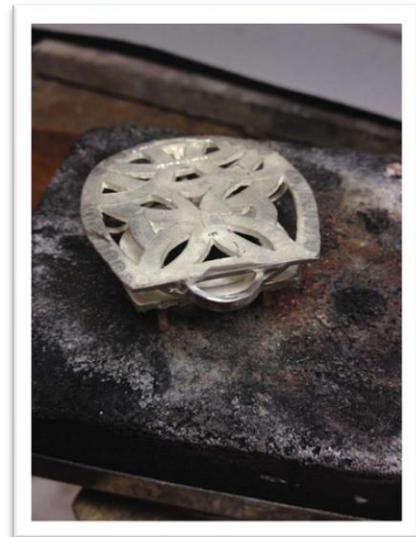
Place the gold leaves onto the piece and solder them using medium silver solder.



### Step 20

Solder the loop that will hold the bail. It mirrors the shape of the bow that was soldered earlier.

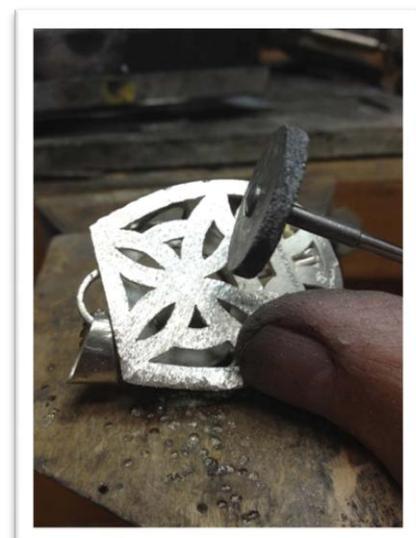
Create the bail using a small gold leaf, which is soldered to a strip of 22gauge sterling that will be shaped to make the bail.



### Step 21

Attach the bail and solder in place.

Using the Mizzy wheel, texture the back in a criss/cross pattern.



### Step 22

The pendant is now ready for the Liver of Sulphur, and pre-polishing.



### Step 23



The stone is set and the pendant is ready for delivery.



## Review Questions

- 1) When soldering gold to silver, the solder used is...
  - a) Hard gold solder.
  - b) Hard silver solder.
  - c) Medium gold solder.
  - d) Medium silver solder.
  
- 2) The finish on the back plate was done with a...
  - a) Satin finish wheel.
  - b) Mizzy wheel.
  - c) Rubber wheel.
  
- 3) Detail of the leaves was done with a...
  - a) Graver.
  - b) Needle file.
  - c) Hammer.
  
- 4) The back plate of the pendant was...
  - a) Solid.
  - b) Engraved.
  - c) Pierced.
  
- 5) The stone used for this project was a...
  - a) Green Tourmaline.
  - b) Green Jade.
  - c) Green Amethyst.