

Creating a Designer Piece

Matt Bezak □ Matt Bezak Design

For the past three years I have been involved in the process of “Cire Perdue,” a lost wax glass casting method. I carve motifs in wax and replace that with colored glass. The affect is a translucent, glowing jewel of my own design.

My current works are involved with this process exclusively. The pendant I have created contains the cast glass element of a rose flower in two shades of lavender, and hand fabricated platinum for the mount.

I wanted to incorporate sculptural glass, with sculptural platinum fabrication, and express beauty through these two mediums. Once the glass “Rose” was completed according to its usage in this design, I could concentrate on the metal.

Here is a step by step pictorial description of the manufacturing process.

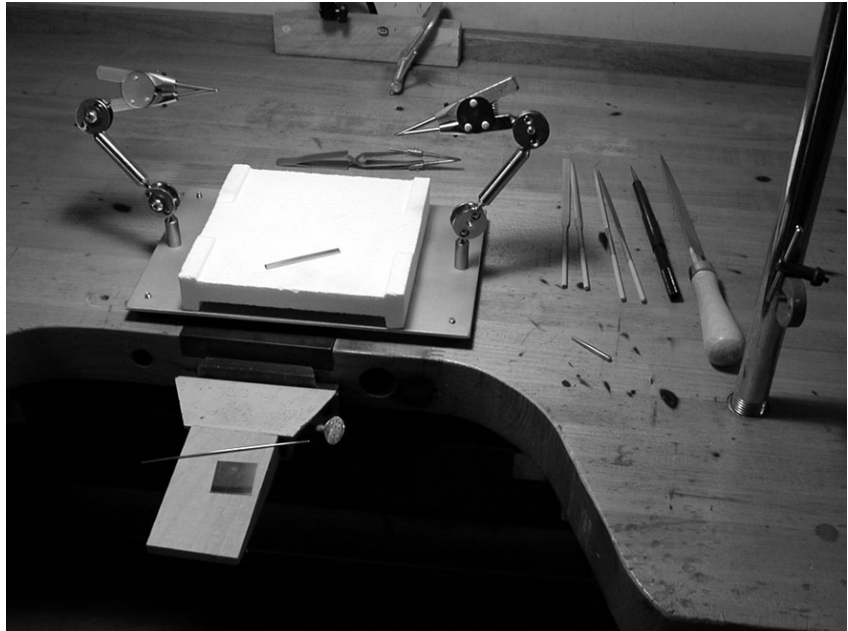


Figure 1: I began fabrication of this piece by placing my Platinum “setup” on a thoroughly cleaned bench. Visible is my Wesco aluminum oxide surface with tungsten carbide jaws, soldering tweezers with the same, Valtitan files, and tungsten carbide burnisher. I also designate a bench pin exclusively for Platinum. Oxygen/Propane as my fuel source.



Figure 2: Using 24ga. Platinum sheet, I pierced out the leaf forms. With a file the profile was detailed to that of an actual rose leaf.

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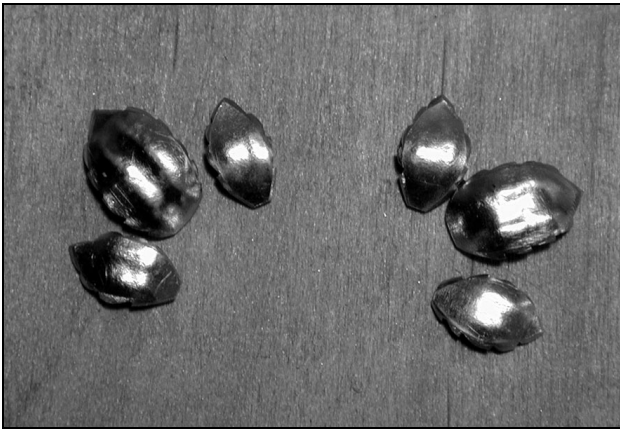


Figure 3: To create volume and contour in the leaves, the elements were placed in pitch to hold them tight. Using a modified tungsten burnisher to “chase” two grooves on either side of center of the backside of each leaf.

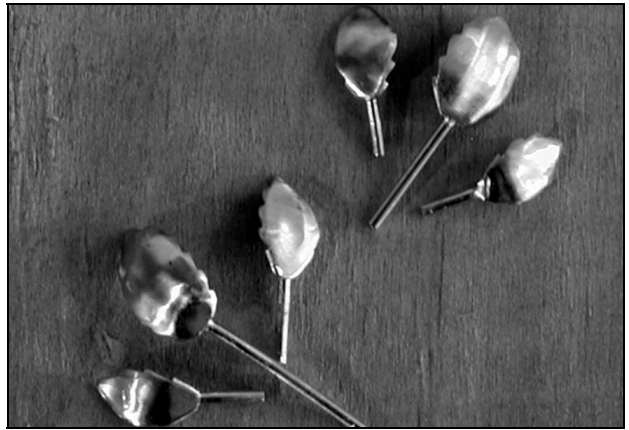


Figure 4: With hard solder (1700 C), 18ga. wire is connected to the base of each leaf.



Figure 5: Here the leaves are showing the “veining” an actual leaf contains. This was accomplished with a hart burr to shape and carve. A groove was added in the connector wires themselves. Each element was high polished before assembly, Advantedge polishing pins were used.

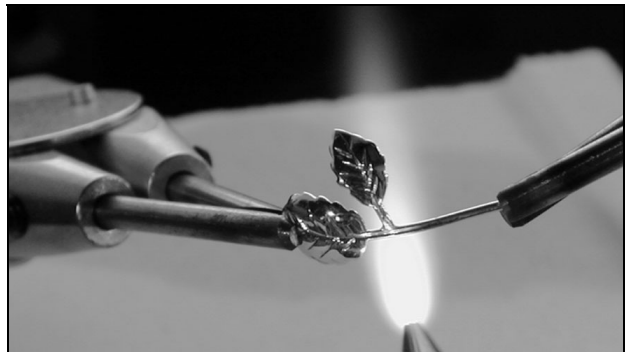


Figure 6: With medium solder (1500 C), each leaf element is attached to its center wire connector.



Figure 7: Placing 18ga. sheet into a pitch pot, and using a steel dapping tool, the rose “cup” is formed to fit the cast glass rose, annealing often as I went.

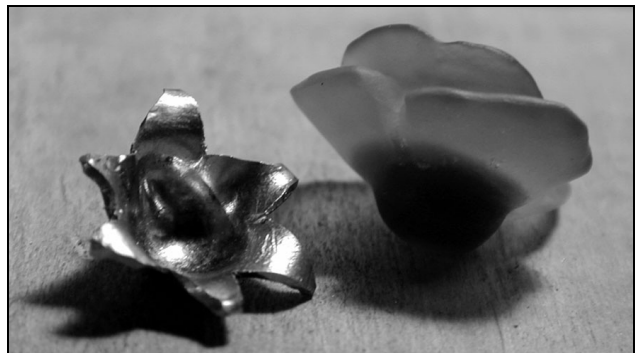


Figure 8: By drawing the desired shape of the cup onto the dapped sheet, it was then pierced out. A hart burr was then used to carve and shape the details. Polishing pins were efficient in the end look of the carved grooves.

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Figure 9: Wire was shaped to create the “stem” of the rose. Thorns are added by soldering (1700 C) the same 16ga. wire to the stem. Clip off the wire, and shape to resemble thorns.



Figure 10: The rose cup detail is visible here. It has been soldered to the stem (1500 C) and a “split” bail has been fabricated and attached (1200C).



Figure 11: Checking the layout after the bail is attached, insures that bezel placement will be correct. The leaf assemblies as well.



Figure 12: Attaching the bezel and leaf assemblies. (1200 C) Visible is the base of the stem. Welding a scrap piece of Platinum onto the 16ga wire, thickened it enough so it could be shaped to form the base of the stem.



Figure 13: Checking layout once more before the gem is set.



Figure 14: Gem setting the rose in the cup similar to a pearl/peg attachment. Epoxy, and a textured wire for a better bond. Finish the piece by attaching the Platinum cable.