



MAKE *Beautiful* MUSIC

by James Miller, MCPE, GCF

When a customer cares enough to put a musical instrument on display, it is probably a significant heirloom to which the owner may have a strong emotional attachment. This “saxonet,” a cross between a saxophone and a clarinet, is a case in point. It has been in the customer’s family for years, and its use even provided income for a time. Some family members still like to play it on occasion. We don’t know its age, but with the recent restoration, it appears to be in excellent condition. The metal saxophone-like parts on the top and bottom are easily disassembled from the black, clarinet-like center section.

Musical instruments present some challenges in framing, but they represent just the sort of job that get our creative juices flowing. That’s where innovation comes into framing, isn’t it? Generally, musical instru-

ments have beautiful workmanship and finishing. Some would say they are works of art in their own right. They also have plenty of three-dimensional visual appeal, with shapely curves and sharp details. They make eye-catching, sometimes stunning, displays.

The customer wanted a simple, uncluttered presentation for the saxonet, so we planned a relatively simple design, with little in the way of decorative features. Key requirements of the design were:

- 1 The frame must allow for occasional removal and replacement of the instrument, quickly and easily, without tools, while the frame remains on the wall.
- 1 The frame should be dust tight and provide reasonable mechanical protection.
- 1 The view of the instrument should be unobstructed from all angles.
- 1 Mounts should be unobtrusive, but durable.

Photo 1: Seen here is the saxonet with the primary elements of the shadowbox, as yet unassembled: the two frames, the fluted polypropylene mounting board, and the PVC backing board.



WITH A *Saxonet* SHADOWBOX *Saxonet*

¹The saxonet should be preserved in its present condition; no changes or damage from the framing.

For this project I used a frame construction that I call "Gravity Groove." This consists of two frames, which are attached to a common backing board with careful spacing between them (see Figure 1). In this case I used two plain, black mouldings, attached by flathead screws to a common backer of $\frac{1}{8}$ " thick, black, PVC sheeting (Sintra). The clear acrylic box was made of $\frac{1}{4}$ " thick material, with a cleanly-finished open edge at the bottom, to fit into the groove. The actual mounting board, attached within the inner frame, consists of two pieces of 4 mm thick, fluted polypropylene sheeting (Coroplast). The boards were laminated together with the flutes crossed for greatest strength; they were attached using 3M #889 double-sided tape. The face of the board was then covered with gray fabric.

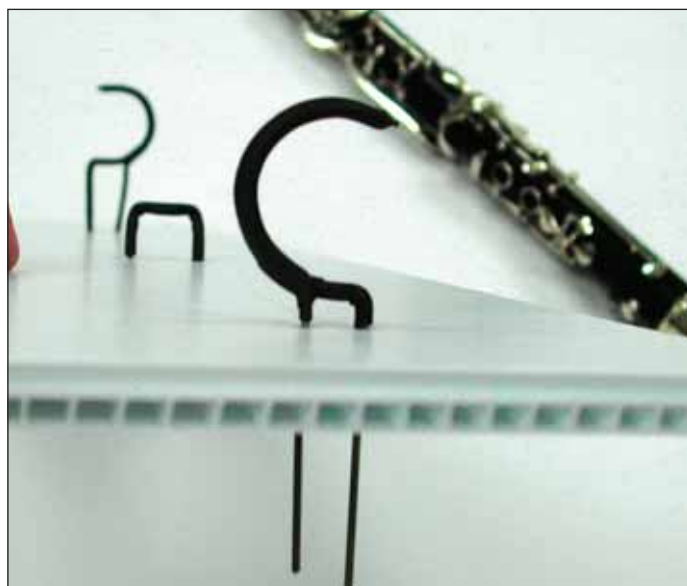
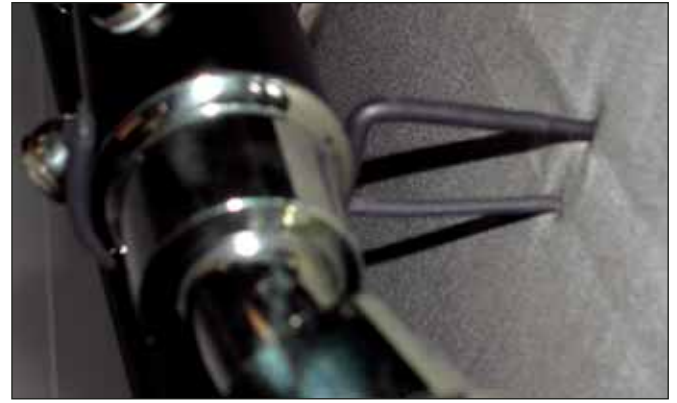
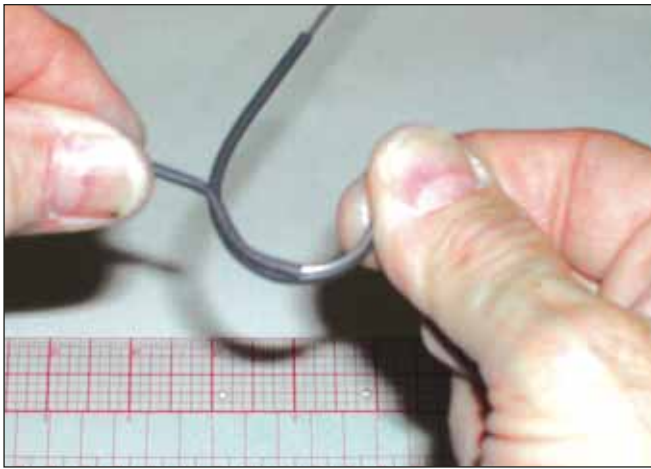


Photo 2: In order to allow for easy removal and replacement of the instrument without tools, I created three bent-rod mounts. To put it in the frame, the user positions the instrument at an angle, and places its back finger-tab on the middle mount. Then the instrument is turned clockwise, locking into the top and bottom mounts. To remove it, the user simply reverses the procedure.



Photos 3, 4, 5, 6, 7, and 8: These photos show how the semi-circular shape of each mount conforms to, and gently grips the instrument. Because the mounts are made of spring steel, their shape and gripping tension may be adjusted by careful bending. Also, the mounts should not lose much of their tension over time, even with repeated use.

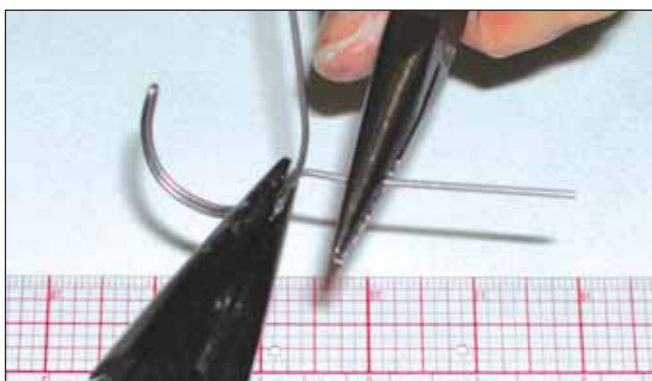
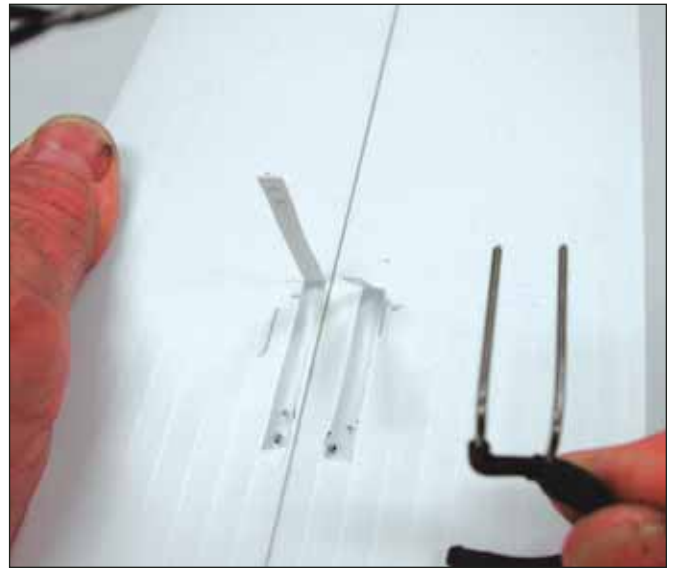
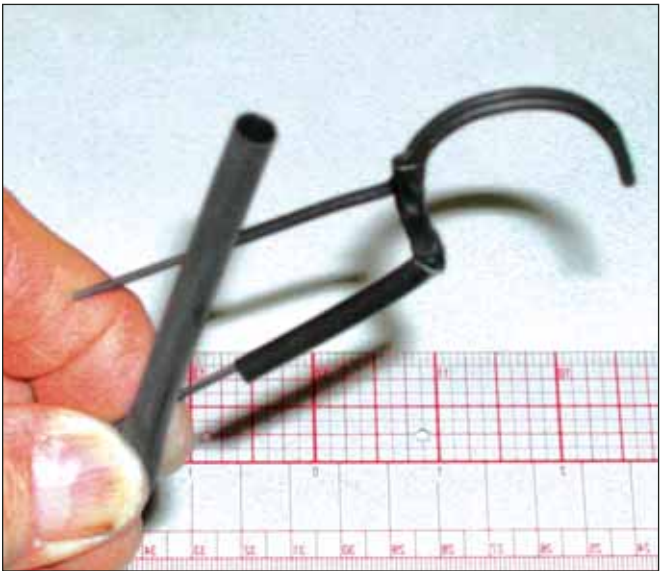
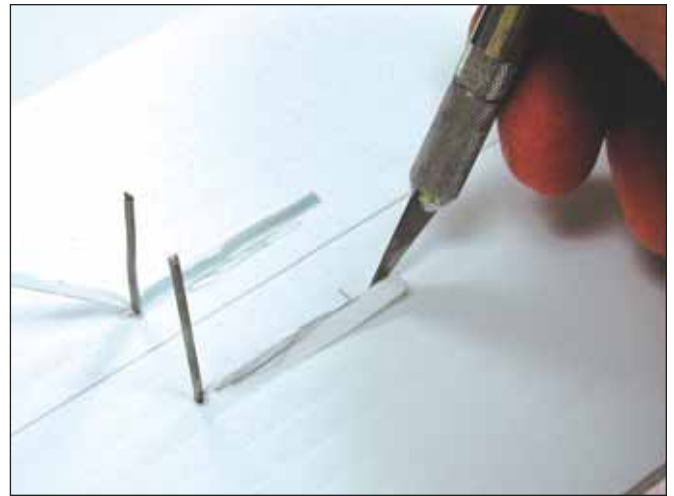
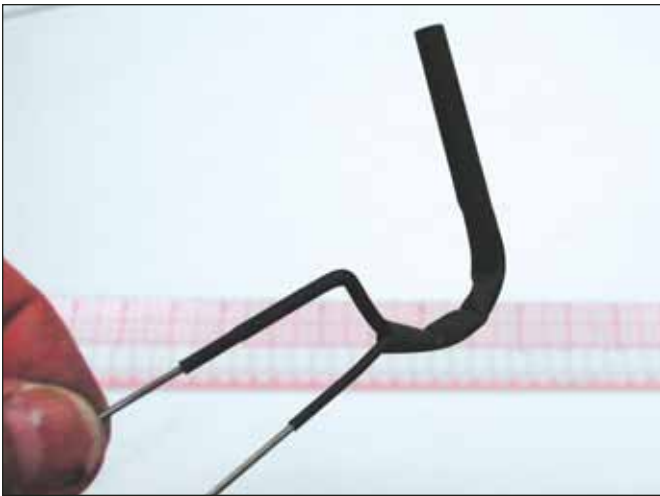


Photo 9: The three bent rod mounts were made from pieces of .032" diameter, spring steel "music wire" (a.k.a. piano wire), available from most hobby shops that sell model-making supplies. The rods were bent into shape by hand, using two pairs of pliers. Heating the wire might have made bending easier, but also might have weakened the temper of the wire.



Photos 10 and 11: After shaping, each mount was covered with shrink tubing, which must be slipped over the rod to cover its area in contact with the item. The tubing provides a matte black, padded finish for the mounts, to avoid abrading the instrument's fragile surfaces.

Photos 13 and 14: After the mounts were fabricated, the mount board was prepared for installation of the mounts. The air space between the flutes of the polypropylene sheeting provides the area to encapsulate each mount. Holes were poked through the top "skin" of the board. Then, the back skin was peeled away to accommodate the anchor segment of the mounts.



Photo 12: The shrink tubing conforms snugly to the shape of the mount when heat is applied. Shrink tubing is available from electrical/electronic parts distributors, in a number of colors and diameters. Radio Shack stores also carry a small assortment package.

Once the board was prepared for the completed mounts, the fabric was stretched over it. Then the mounts were encapsulated into place from the back of the board. I used hot melt glue here, but epoxy or any hard-setting glue would work as well.

Next, I assembled the finished mount board into the inner frame, and attached both frames to the common backing board. The two frames were carefully positioned, so that top inside edge of the acrylic box rests on the top rail of the inner frame, while gravity makes the bottom edge of the box swing into the bottom groove.

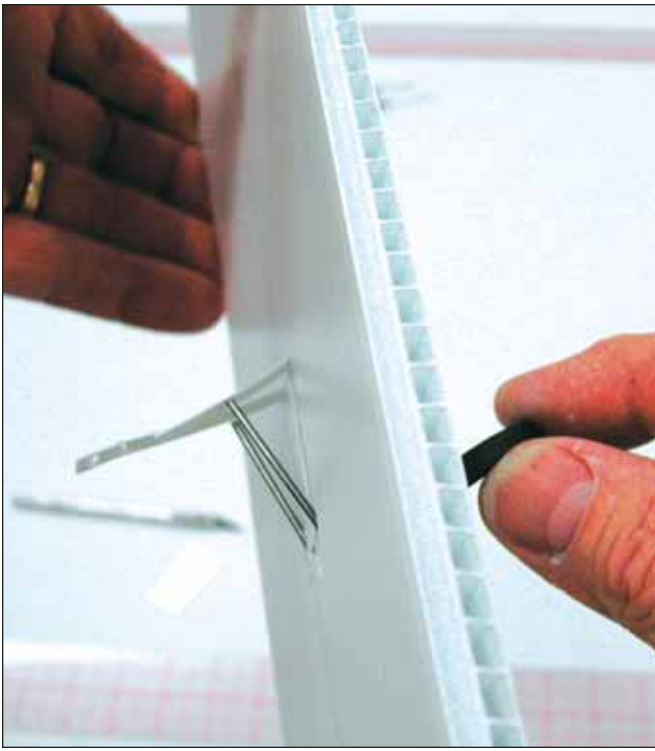


Photo 15: The anchor segment of each mount was bent up, to fit neatly between the board's flutes. By what I call the "pegboard principle," the bent-up portion of the mount, encapsulated between the flutes, transfers the load to the back of the mount board (see Figure 2).

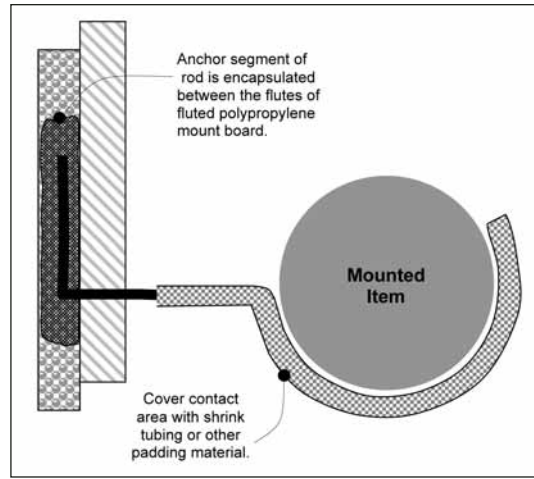


Figure 2: A formed rod mount was used to hold the saxonet in place.

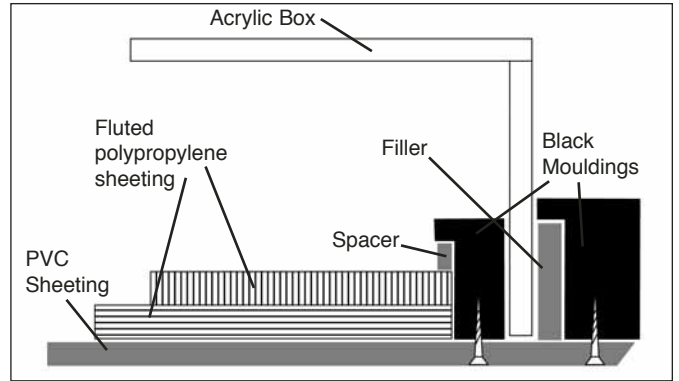


Figure 1: A "gravity groove" is created with the construction as shown above. Here you see the components of the shadowbox.

Otherwise, if the bottom of the acrylic box rested on the bottom rail of the outer frame, then the top of the box would tend to fall outward. Gravity works.

Note: The "Gravity Groove" shadowbox construction and bent rod mounts used for this project are detailed in "The Complete Guide to Shadowboxes and Object Framing," which will be taught at the West Coast Art & Frame Show this upcoming January. n

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founded his retail business, ARTFRAME, Inc., in 1988, and has focused on preservation framing of art and objects as both a student and educator, including at the National Conference.

