An Open Letter Regarding Your Mandolina Organette, #1479

Some considerations regarding restoration, from a restorer to a customer.

Gary G. Stevenson

As I stated on the phone, as soon as the box got to my studio, I checked the shipping box for any damage on the outside and opened it to check the contents.

Photo 1. Pumping exhauster with the reservoir taped off.

Thanks for sending a roll for testing the organette. With so many different types of organettes that were produced, it is almost impossible to have on hand a roll for every design.

After unpacking the box I tried to play it. I turned the crank at a slow, even rate. Even though the roll was moving past the tracker and noise was coming out, I did not hear a tune. I observed that about four notes played all the time. This told me that the pump and reservoir were probably "OK" as these notes sounded loud and clear with very little cranking. Without opening the machine, I felt that it had some type of valve problem.

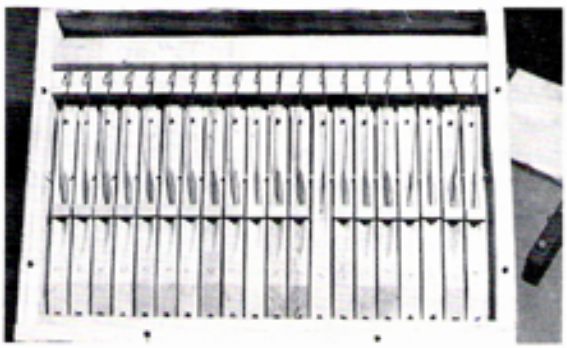

Photo 2. The pallet valves, showing one of the back-check springs is missing.

I took the organette apart to check it further. Upon opening the chest, I taped up the holes that lead from the reservoir to the inside of the chest and pumped each exhauster by hand. It took nine strokes to empty the reservoir for each of the three exhausters (**Photo 1**). With all three exhausters working (the equivalent of three slow rotations of the crank), I felt this would be enough vacuum to operate the organette. Confirming the condition of the pump, I put it aside in favor of the upper wind chest.

Taking the valve section of the organette and turning it over, I checked it for broken or missing parts. As you can see in **Photo 2**, one of the pallet spring back-check blocks is missing. This block keeps the spring from jumping out of the pallet slot. In this case this small missing pine block is not causing a major problem. In a major restoration; however, it should be replaced.

I next looked for obvious pallet valves sticking open. When none were found, these doors were numbered, then removed (**Photo 3**). The pallet doors were checked for their sealing leathers. In this case the leather previously used was too hard. It did not conform to the reed cell openings. This allows air to pass by them, resulting in stray, constantly sounding notes. This problem can be solved by turning over each of the small patches of leather so the softer, fleshy side will be the sealing surface instead of the harder, lacquered grain side. (This solution can be seen in pallets numbers 8 and 10 in **Photo 3.**) While these leathers were off the pallets, I checked the pallets for warp (**Photo 4**). A better solution

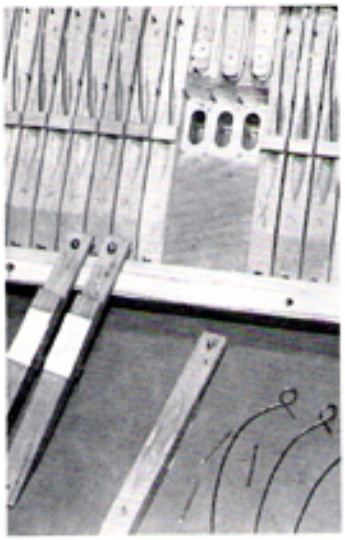

Photo 3. Showing the underside of two pallets where the leather patches are used to keep a good air seal.

than turning these leathers over would be to remove them and replace them with much softer ones. Note: If this was one of my organettes, I would use a two-part valve facing. This is one with a base of felt to aid in conforming to the reed cell and a surface covering of soft white, alum-tanned leather that actually does the sealing. This felt-leather pallet sealing method has been found in almost every parlor organ I have ever worked on.*

While the pallets were out of the your organette, I checked the puff valves. These puffs expand by the air signal sent from the tracker bar and push the pallet doors up, opening the reed cell to vacuum. This, in turn, systematically plays the tune roll. Because of a previous restoration, the puffs were not put back into the organette straight (**Photo 5**). This allowed them to hit one another and, in turn, rubbed holes in the zephir leather covering. The puffs must be removed, recovered and properly installed in your organette.

When I first inspected the upper portion of your organette, I noted many miss-matched wood screws. Four of these became very important to the restoration after the removal of the pallet doors for inspection. Two each of these four screws were installed on both sides of the upper chest during a previous "restoration" to hold the pallet spring board in place. This board was originally held in place by four glued, wooden pegs or dowels. These pins must be removed to work on the puffs. When this board was put back into the organette, the holes from the pegs were not repaired. Instead, large, over-sized screws were used to hold the spring board in place. These screws split the ends of the board (**Photo 6**). In a proper restoration, this board would need to be reproduced.

While I have your organette apart for restoration, I would take the time to make it look as good as it will sound. I would scrub the wind chest with a liberal amount of denatured alcohol and fine steel wool to clean it. This solvent softens the original finish, allowing it to be removed and taking with it years of grime. The chest would then be given a good coat of orange

Photo 3a. Leathers being glued and clamped to the pallet valves.

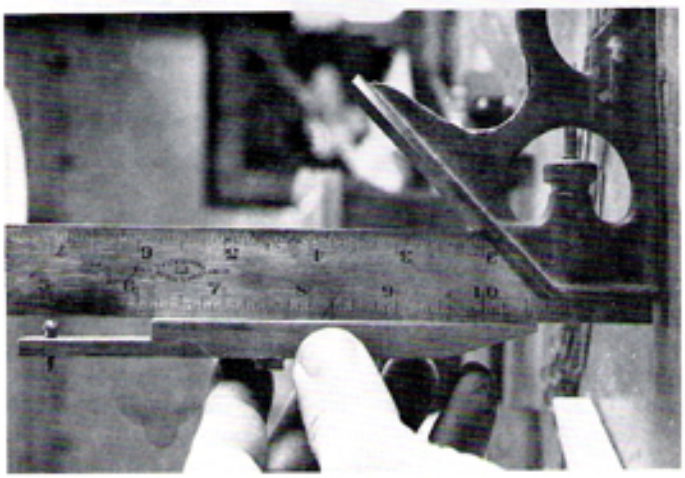

Photo 4. Checking the pallet valve for warpage.

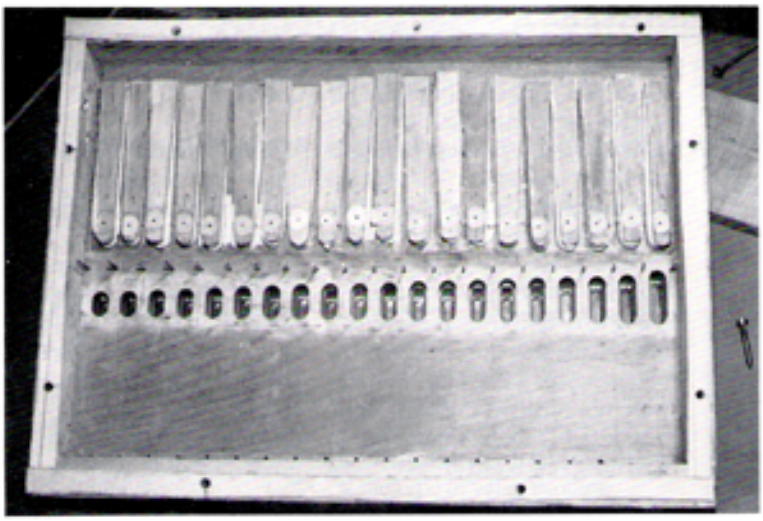

Photo 5. The puff valves needed to be re-straightened from a previous, improper restoration.

Photo 6. Close-up of the puff valves. The operation of these valves is critical because they are the direct link between the tracker bar and the valves. If they don't open and close on command, the music will not be in proper tempo.

Photo 7. The entire case will be rubbed with denatured alcohol, using fine steel wool. This will soften the old finish and will take with it years of grime.

shellac (a 3 lb. mixture) to increase its moisture protection. This shellac would make the organette look better and seal the pores of the wood lessening vacuum loss for more efficient operation (Photo 7).

The steps I have outlined will make the inside of your Mandolina playable and will make it look good once more. These things do not take into consideration the outside stenciling and final finish of the case. Please consider that the case has some problems as well. As you might think, all of this work will take time (time is money). If your goal is to restore this organette for resale, I feel a total restoration will cost more than its present market value. If, however, this is a family heirloom, not for sale at any price, these procedures will keep it humming for your heirs in order to play your grandparent's airs.

*For more information on felt-leather pallets, see pages 161-165, *Restoring & Collecting Antique Reed Organs*, Horton Presley.