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Restoration of 1904 Menzenhauer/Oscar Schmidt Jamestown Model Chord Zither



Completed by Ron Cook

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For Abe Ostrovsky

Background

Chord zithers, often called Guitar Zithers, were very popular from the late 1800s to mid 1900s, and hundreds of thousands were made by several companies. Friederich Menzenhauer and Oscar Schmidt were a major manufacturers from 1897 to 1900 and called their company the U.S. Guitar-Zither Co. In 1900, Menzenhauer sold his share to Oscar Schmidt, who continued making chord zithers but his name became synonymous with autoharps, which are still being made by the Oscar Schmidt Company today.

Chord zithers of various types were already being made in Europe when Friederich Menzenhauer was granted his first guitar zither patent on May 29, 1894. (See below.) Menzenhauer has been called the “father” of the guitar zither in the U.S. and produced, first on his own and then with Oscar Schmidt, thousands of instruments, some using his own label and many others for private labels like Sears and Montgomery Wards.

(No Model.)

2 Sheets—Sheet 1.

F. MENZENHAUER.
GUITAR ZITHER.

No. 520,651.

Patented May 29, 1894.

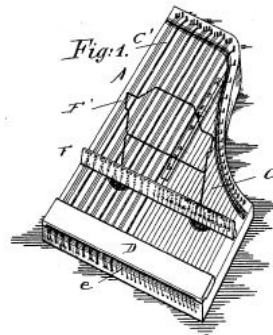
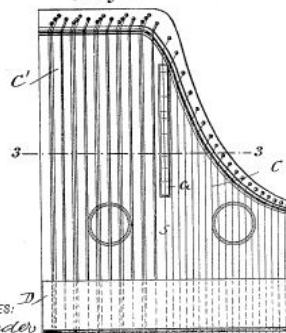
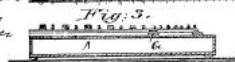


Fig. 2.



WITNESSES:
Charles Schroeder
Joseph Scherer



INVENTOR
F. Menzenhauer
BY Joseph R. Piquette
ATTORNEYS.

THE NATIONAL LITHOGRAPHIC COMPANY,
WASHINGTON, D. C.

Even though Oscar Schmidt bought out Menzenhauer in 1900, both names still appeared on the instrument labels through 1904.



The instrument I restored is called the Jamestown Model. The image on the decal is of the Palace of Varied Industries, one of the huge exhibition halls at the 1904 St. Louis World's Fair (also called the Louisiana Purchase Exposition). Oscar Schmidt used this image for several different guitar-zither models in 1904-05. The actual model number is No. 2. It was one of the most popular models from around 1887 through the early 1900s. It has four chords, C, F, G, and G7, and 17 melody strings.

I found no information on why this instrument was called the Jamestown Model. I can assume it could refer to Jamestown, Virginia, one of the first towns settled in the U.S., but that has nothing to do with the Louisiana Purchase. There is a Jamestown, Missouri, but that's far from St. Louis. Oscar Schmidt's used the same Palace of Varied Industries image on his St. Louis model, which is identical to the Jamestown model. Only the decals differ.

Valuation

Chord zithers from several U.S. companies were made in the hundreds of thousands and were sold door-to-door through the depression years and by Sears Roebuck and Montgomery Ward catalogs from the turn of the 20th century up to the 1950s. Because so many have survived, prices are relatively low compared to other stringed instruments. Occasionally, very well made and ornately decorated zithers from Germany, Austria, and other Eastern European countries come up for sale and fetch slightly higher prices. It's the more recent popularity of online auctions that has kept prices low for most of these instruments. I've seen prices range from as low as \$10 to over \$300, depending on condition and rarity of a particular model.

But, for many people, the value of an instrument is not monetary, but sentimental. To be able to have a restored piece of family history on display, to know its use, its background, and who played it, and to be able to pass it down to future generations, is priceless.

Day 1: Assessment



On the first day, I always look over an instrument to see how much work is needed to repair or restore it. Glue joints around part of the top and the whole tail block had failed. Because this is old hide glue, failure is usually caused by dampness, which makes the hide glue become viscous again. With the strings still tight, the tension pulls parts of the top and frame right out of the softened glue.

Fortunately, only the top was warped, not the frame. If the frame had warped, I would have had to take the entire instrument apart. Also, it was fortunate no cracks had developed. That's often the case when instruments like these go from damp to extremely dry conditions. Many times as the wood dries, it shrinks, and cracks develop.

The hitch pin cover, which is also often used as a wrist rest when playing the zither, was broken and was missing a large piece.

The top angled bridge, called the nut, had a small piece broken off and it was also missing. The tuning pins were corroded, and the strings were too corroded and too brittle to save. The tuning pins can be cleaned, but all new strings would be needed.

The surfaces needed a good cleaning. Besides normal dust and grime, there were a few small water marks and what looked like white paint, but turned out to be something easily cleaned with a damp sponge.

Day 2: Remove Strings and Bridge Hardware



On the second day, I removed the strings and bridge hardware. The bridges have several steel rods that sit in little grooves that the strings go over. Without these rods, the strings would cut through the wood bridges. (This is often the case on cheaper “children’s” zithers.) The rods, like the tuning pins, were corroded and needed cleaning.

One note about the tuning pins. In American zithers from that era, and even today, tuning pins have standard right-hand threads. You tighten clockwise, loosen counter-clockwise. European zithers from the late 1800s and the early 1900s that I’ve worked on have tuning pins with left hand threads. To loosen them you turn clockwise. To tighten, you turn counter-clockwise.

Day 3: Inject Glue and Clamp



Because only a section of the top and frame had come apart, I didn't need to disassemble the instrument. Instead, I used a glue syringe and injected glue in all the loose joints. Before I did that, I had to scrape and clean the old hide glue off. Once cleaned, I injected the glue and clamped all the repaired areas.

Day 4: Cleaning



A few days later, after the glue had cured, I removed the clamps and began cleaning all the dust and grime off the top, back, and sides. The top and sides have a nice dark, reddish, mahogany stain, so I used a sponge dampened with water and a mild dish soap to clean them. The back was painted black, and a little scratched and worn, so I used 0000 steel wool to clean it and get it ready for a new coat of paint. Before cleaning I did remove the three small tacked-in feet.

Day 5: Cleaning the Tuning Pins



On Day 5, I spent a couple of hours cleaning the rust and corrosion off of the tuning pins. To clean them I use a small wire bristle wheel mounted on the flexible shaft of one of my rotary tools.

Day 6: Making New Hitch Pin Guard



Day 6 started by removing the remaining piece of wood from the hitch pin guard and wrist rest. After cleaning the glue off and planing the joint flat again, I cut and sanded a piece of maple to the shape of the original, sized it, then glued it together.

Days 7 through 10: Painting the Back



Over the next four days I applied several coats of gloss-black enamel to the back and on the new hitch pin cover. Before I started painting, I had to make sure the natural wood on the sides was protected by covering it with painters tape.

Day 11: Cleaning Bridge Hardware



I needed the paint on the back to cure for a couple of days before polishing it (it was a damp week), so I spent part of Day 11 cleaning the bridge hardware.

It took both 220 grit wet-dry sandpaper and 0000 steel wool to get all the corrosion off. Once removed, I put some paste wax on the rods, which will help protect them from further corrosion.

Day 12: Rubbing Out and Polishing Back



Now that the paint had cured, I started the polishing process. I first sprinkle ground pumice on the back and wipe it with a pad soaked with rubbing oil. Rubbing oil is a mineral oil formulated for polishing work. Pumice is a light abrasive that's good for removing any dust and/or brush strokes that ended up in the paint.

I then do the same with rottenstone. Rottenstone is a very fine abrasive that leaves a surface ready for paste wax, which I use last.

Days 13 through 16: Touching up Side Stain and Varnish



Areas around the sides, where I re-glued the top and frame back together, had some stain and varnish missing. This was because I scraped them when cleaning off glue that had squeezed out during the clamping process.

To protect the freshly painted back, I applied painter's tape around the edges. I then set the zither on its side, using clamps to hold it in place, and began four days of staining and varnishing.

Day 17: Nut Repair



After the side varnish cured for a couple of days, I worked on repairing the small missing piece at the end of the nut.

I used a small chisel to square off and clean the ragged break, then I cut and sized a small piece of maple and glued it in place. Once the glue dried, I used the chisel to match the new piece to the rest of the existing nut.

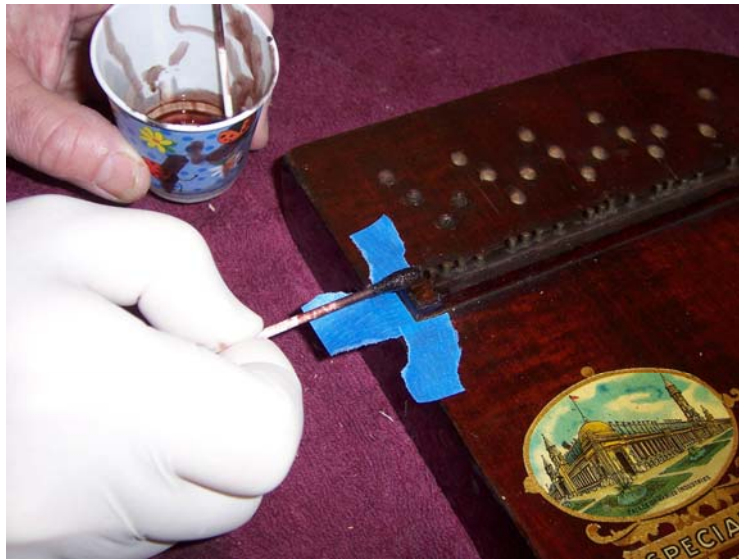
Day 18: Reinstall Feet & Polish Top



The three small feet on the back are like round-head carpet tacks. A small hammer was all it took to tap them back in place.

Later that day I went through the same polishing process I did on the back. Pumice, rottenstone, and paste wax made the top and the decals shine like new.

Day 19: Touchup Nut Repair & Apply “Swelling” Liquid



To match the new piece to the rest of the nut, I combined tung oil varnish with some coloring and applied it with a swab. Two coats was all it took.

While the nut piece was drying, I squeezed some special liquid into the tuning pin holes to “swell” the wood. This liquid, called Chair-Lock, is a special formula that actually swells the wood as it soaks in. When I had removed the tuning pins at the start of this restoration, many of the pins were loose. Using Chair-Lock will help hold them in place when I reinstall the pins.

Day 20: Reinstall Tuning Pins & Prepare To String



On Day 20, it was time to reinstall the tuning pins. This took several hours. With the tuning pin holes soaked with the Chair-Lock, the pins went in nice and tight, but still easy to turn for stringing and tuning.

I also set up the bridge hardware and got ready to begin stringing.

Days 21 and 22: Stringing and Tuning



Zithers have a lot of strings. It took me two days to complete the stringing. On Day 21 I installed the 16 chord strings. On Day 22 I finished up with the 17 melody strings.

Finally, I reinstalled the hitch pin guard.

Day 22: Tuning and Completion



The last day was time to tune up the zither. I have a digital tuner that attaches to a part of the instrument with a clip, usually clipped to one of the tuning pins. When a string is plucked, the vibration is picked up through the clip, which has a contact microphone on it, and displays on the tuner's screen. With 34 strings, this took a little time.

Like many zithers from this era, the tone is unique and very beautiful. I'm happy I was able to restore an instrument that is over 100 years old to be playable again. I'm sure that with continuous playing and good care, this Menzenhauer/Oscar Schmidt Guitar Zither should last another 100 years.