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**Ron Cook Studios**

147 Sacramento Avenue - Santa Cruz, CA - 95060 - (831) 425-4933 - [www.roncookstudios.com](http://www.roncookstudios.com) - [ron@roncookstudios.com](mailto:ron@roncookstudios.com)



# **Restoration of a circa 1900 G. A. Pfretzschner Violin**



**Completed by Ron Cook**

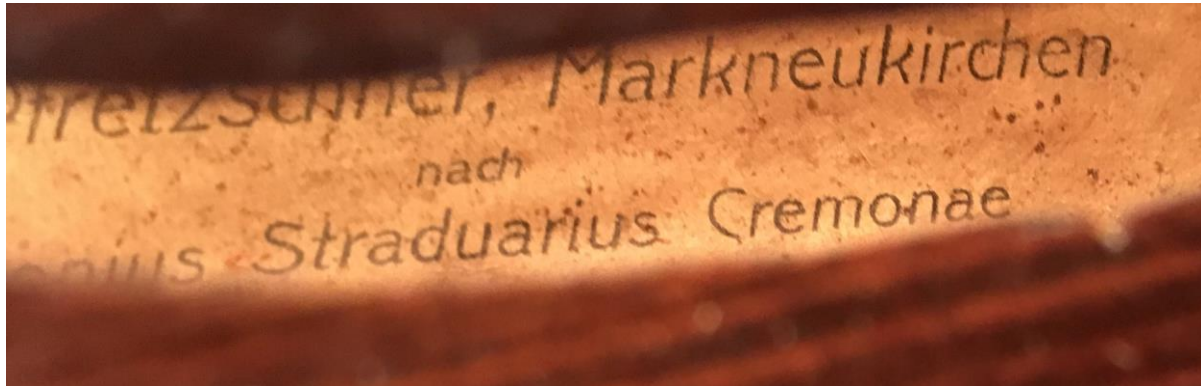
**March 2017**

**For Tom McKay and Jill Gallo**

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## Background



A peek through the f-hole of your violin

The name Pfretzschner, has been in the records since the 1600's as makers of violins, violas, cellos and stringed basses, as well as makers of bows for those instruments. The book [German and Austrian Violin-makers](#), by Karel Jalovec and Paul Hamlyn, English translation, 1967, pp 292-293, lists 27 members of the Pfretzschner family from 1680 to the early 1900's who were craftsmen of instruments and bows.

The name G. A. Pfretzschner is not listed in the book. From further research I discovered this was the name of a large wholesale business. It was founded in 1834, and it started life as M. C. R. Andorff (a name listed in the book as a repairer of violins). Subsequently, the business became the property of Adolf Pfretzschner and later passed on to his son Kurt Pfretzschner and a foreman in long standing, Max Martin. It was then named Deutsche Signal-Instrumentenfabrik Pfretzschner & Martin. Later it was simply called Pfretzschner A. G., then, it seems the name G. A. Pfretzschner was used on labels for exported violin family instruments.

Markneukirchen, where most of the Pfretzschner family lived, is in the Free State of Saxony, Germany, close to the Czech border and had been known since the 1600's as a center of German violin production. The words "nach Antonius Straduaris Cremonae" on the label means that the violin is after the style of Antonius Stradivarius in Cremona, Italy. Many violins made over the years are based on the style of Stradivarius, and thus noted.

I found in my research that the sole importer of G. A. Pfretzschner instruments in the United States was M. E. Schoening, 369 Broadway, in New York City. I've come across this name and address before when I was researching the history of German made concert zithers. Schoening imported and distributed instruments of all types to stores around the country, including Sears Roebuck and Montgomery Ward catalogs. German violin production was high until World War I, and started up again after that war and lasted into the 1930s. World War II ended nearly all German violin production.

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## Valuation

There were tens of thousands violins, violas, cellos, and bass viols, as well as bows, manufactured by Pfretzschner family members in Markneukirchen, Germany, from 1700 up into the 1930s.

Finding the value of this G. A. Pfretzschner “Straduarius” violin has been a challenge. There were several versions of these violins, from inexpensive student models to extremely well-made concert models. This particular model appears to be one of the student models.

The spruce top is well shaped, but slightly thick. However, the sides and back are very beautiful figured maple, which was the norm for all Pfretzschner violins. The neck and head are well carved, and the ebony fingerboard is in good shape with no pitting from heavy use.

I’ve seen prices on Ebay and auction sites range from \$100 to \$1800 for the same type of violin in all conditions. I feel this violin’s value could fall in the \$200-\$300 range, mainly due to the original top varnish having been removed when I received it.

As a side note, G. A. Pfretzschner violin bows have been known to sell for over \$3000. As is often the case, violin bows are often more valuable than the violins they’re paired with. I know of two times several years ago on the PBS series Antiques Roadshow, someone brought in a violin to be valued only to find the bow worth much more than the violin. Unfortunately, the accompanying bow to your violin is missing the frog, which is where the horsehair attaches. It is very straight (not warped), and could be restored and rehired by a professional violin luthier.

In Soquel is David Morse Violins. In Westside Santa Cruz is Thomas Musical Instruments.

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## Day 1: Assessment



On the first day I always do a thorough assessment of the instrument. This violin had some problems, but not enough to require taking it apart.

It came to me with the top varnish already removed, and the back had a spot of missing varnish. The top had two cracks, one over the bass bar, and one extending from the soundhole to the tail end. Glue joints had failed on the top and bottom of the tail end.

The soundhole, where one crack started, also had a piece of the f-hole carving missing.

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## Day 1: Assessment (continued)



Along one edge of the upper bout, a piece had been chipped off. Both the ebony nut and tail guard piece were loose and fell off when I removed the strings.

I noted that the ebony tuning pegs were of different lengths. Two were identical, but one was shorter and one was longer. Also, the finger grips were a little different. This shows that two of the pegs are replacements. Probably the originals (like the two on the left in the photo) broke and were replaced with whatever was available at the time.

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## Day 2: Chip Repair



I started the repair process by fixing the chipped edge on the upper bout.

Since the violin was over 100 years old, I wanted to use the same age of spruce to patch the edge. I have a concert zither of the same age that I bought for parts. The top is a veneered spruce, so I cut a piece of the underlying spruce to use for the patch. The color and texture were perfect.

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## Day 3: Removing Remaining Top Varnish



The next day I was in the shop I removed the rest of the top finish that was hidden under the tailpiece. I used a cabinet scraper to get the varnish off, then fine sandpaper to smooth it out.

The fingerboard had some discoloration, probably from varnish remover, so I used extra fine sandpaper to clean it off.

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## Day 4: Sanding/Shaping Chip Repair



When I glued the small spruce piece for the chip repair, I still needed to sand it down to even it out. I used several grades of sandpaper to round off and smooth out the edge. I feel it came out quite well.



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## Day 5: Fixing Failed Glue Joints



Several days later, I needed to glue and close up the openings on the tail end before doing more work on the varnish removal. I use spool clamps for this process because they are padded and don't leave marks or dent the wood like standard wood clamps. Spool clamps are always used for stringed instrument building and repairs. I do this type of repair with hide glue.

Nearly all stringed instruments, especially older ones, are assembled with hide glue. Hide glue is reversible. This means that for repairs where a top or back need to be removed, a little heat and moisture can make the glue viscous again.

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## Day 6: Crack Repair



The two top cracks were the result of wood shrinkage. This is common in older instruments that have been stored away for a long time. Some shrinkage cracks are nearly impossible to squeeze together to close up. Tiny ones can be closed, but wider ones need a filler piece to close them up.

For the small crack below the right soundhole, I stabilized it with a Titebond CA wood glue (instant glue) and squeezed the sides of the top to close it up. For the larger crack, I took a long piece of my zither spruce and shaved it down to a taper so it would fit into the crack tightly. For this I used a thin white glue.

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## Day 7: Removing Back Varnish



The varnish on the back had a large bare spot where the violin might have been set down on some varnish remover, which was used to remove the top's varnish.

Using cabinet scrapers and several grades of sandpaper, I cleaned all the remaining varnish from the back.

There were also two small bare spots on two side sections. I removed varnish from these areas, but left most sections with the original varnish, which would allow me to match the coloring later.

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## Day 8: Repairing Missing Soundhole Piece



The right f-hole had a piece missing right above one of the top cracks. I took a small piece of my old zither spruce and used instant wood glue to affix it in place. I then used a rotary carving tool with a very fine burr bit to shape it.

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## Days 9-13: Refinishing Sides and Back



For the next five working days, I applied several coats of coloring stain to the sides and back.

During this period, unusual, huge, rainstorms started. Because of the dampness, the stains took several days to dry before I could apply a second coat.

The first coat of stain always raises the wood grain a little. I used 0000 steel wool between coats to smooth it out.

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## Days 14-19: Refinishing Top



The maple sides and back were easy to match the original color. The top was much harder, because it had been completely stripped of its color and varnish. I had no way to match the original color.

Because the sides and back were brownish with a slight red tint, I mixed custom colors to apply to the top. Again, due to more heavy rains, the coats of stain took days to dry. (On warm, dry days, finishes can dry within 24 hours.)

Again, I used 0000 steel wool between coats to smooth out the wood grain.

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## Days 20 to 23: Violin Varnish



After the stains finally dried, I was able to apply the top coat of violin oil varnish. I used an amber-colored varnish, which is fairly neutral allowing the stain color to show through.

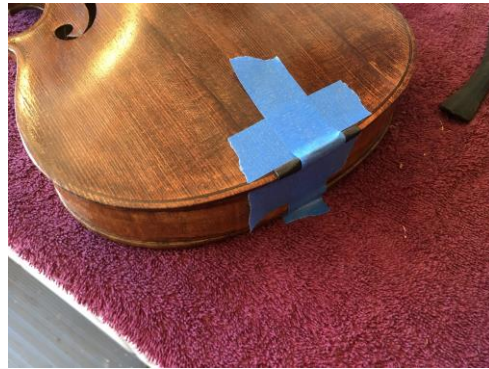
I use oil-based violin varnish for complete refinishing. For spot finishing, like on the sides, I use a spirit varnish. Oil varnishes take a while to dry. Spirit varnishes dry within minutes, making them impractical for large areas.

Again, much rain, slow drying.

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## Day 24: Gluing Pieces and Fitting New Tail Gut



With the varnish dried, I was able to glue the nut and tail block in place. I also inserted a new tail gut to the tailpiece.



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## Day 25: Polishing



On this day I spent several hours on the polishing process.

I first sprinkled pumice on the violin and rubbed it out with a lint-free cloth soaked with a rubbing oil (mineral oil). Next I did the same with rottenstone. Pumice is a very light abrasive used to remove any dust specs and/or very light scratches in the finish. Rottenstone is an extremely light abrasive that smooths out surfaces even more.

Following the pumice/rottenstone rubbing, I used a mahogany colored paste wax to give the violin a nice sheen.

For the fingerboard, I used fingerboard oil. This special oil brings life back into dry fingerboard wood.

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## Day 26: Setting the Soundpost



I noticed when I first started working on this violin that there was no soundpost. This might have been one reason for the crack at that side of the violin.

I have special tools for measuring and setting soundposts. After cutting a small dowel to fit, I drilled a tiny hole and inserted a piece of dental floss, so if the dowel dropped inside, I could pull it out and try again. It took a couple of tries, but I was finally able to set the soundpost in the correct location. After the soundpost was in place, I cut the dental floss and removed it.

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## Day 27: Stringing



Finally, it was time to string it up. The strings I purchased were the Prelude brand light tension strings by D'Addario. I had an old used violin bridge in stock that fit this violin perfectly.

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## Day 28: Completion



I feel this restoration came out quite well. The “fiddleback” maple and side maple pieces have a beautiful grain pattern. The spruce top is once again stable, making this violin playable again.

At over 100 years old, I’m sure this violin will now last another 100 years.

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