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Restoration of 1915-1925 Kumalae Ukulele

Performed by Ron Cook

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For Sister Michaela Siplak

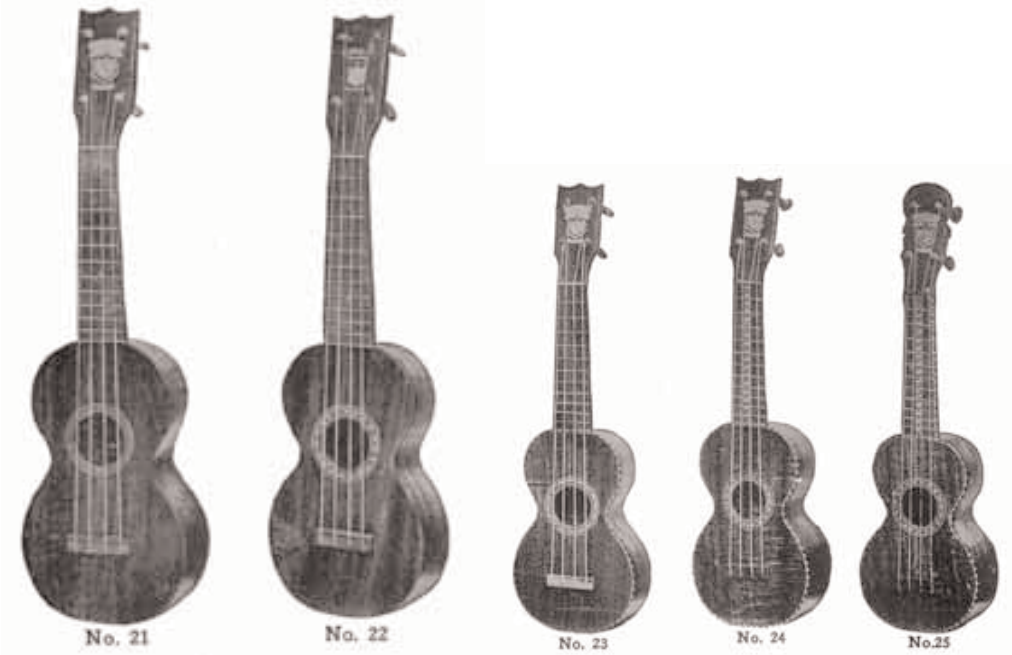
Background

Jonah Kumalae made a decision to set up a booth at the 1915 Panama Pacific International Exposition in San Francisco and never looked back. He showcased his finely crafted ukuleles with Hawaiian musicians brought over to play them and won a "Gold Award". He proudly displayed a decal of it on all his ukulele heads from that point on.

A personal friend of mine and ukulele enthusiast indicated that over 600 ukuleles were produced each month in Kumalae's workshop during the 1920s and 1930s. He also mentioned that Kumalae ukuleles were often handed out to passengers on cruise ships heading to the islands and classes were given during the voyage. Some hotels are rumored to have had Kumalae ukuleles in rooms for guests to have and play. By the end of 1930, thousands of Kumalae ukuleles found their way around the world. At its height, Kumalae employed 50 people and had a 20,000 square foot factory, where he also made instruments for other companies, like Sherman, Clay & Co. (see below) and for some mail order catalog companies.

Kumalae ukuleles were known for their beautiful curly Hawaiian koa wood and the ornate bindings on the higher-end instruments. Like many other ukulele manufacturers, Kumalae closed his business in the early 1940s due to a falloff of business during the war.

The following photo is from a 1925 Sherman, Clay & Co. catalog showing five models numbered 21 through 25, which correspond with Kumalae models A through E, or 1 through 5, respectively. Described but not shown in the catalogue is a Style 20, a plain, "straight grain koa" ukulele with one inlaid ring around the soundhole. It sold for $9.00. This model is also known as a Kumalae Style 0. All models of Kumalae ukuleles were french polished. Celluloid and mechanical friction tuners could be ordered in place of the stock ohia wood pegs at additional cost.



Valuation

Even though Kumalae sold many thousands of ukuleles in the 1920s and 1930s, not too many have shown up for sale. More than likely, this is because of the very delicate nature of the instrument. The koa wood is very thin, and once away from Hawaii, the koa dried out and often cracked or split. Without proper care, many probably fell apart and were thrown away.

This particular ukulele is the Model 0, which was the "bottom" of the Standard size ukes. As mentioned before, it originally sold for nine dollars.

Examples of Kumalae Ukuleles I've recently found for sale on ebay have been priced from around $150 to over $500. I also found some information about Tiny Tim's Kumalae Ukulele that sold at auction for $1600. However, these were all fancier models with intricate bindings and inlay. The Model 0 shows up occasionally in all states of repair and disrepair, with prices ranging from $125 to $300.

I feel that this Model 0, in its restored condition, should be able to sell in the $200 to $300 range. It may not bring top dollar, due to a slight warp in the neck that may have occurred shortly after it was built. Warps are caused by the wood having uneven grain and/or drying out unevenly. However, it does fret true, producing a beautiful tone that, as my good friend described, is "the real Hawaiian ukulele sound."

Day 1: Assessment

On Day 1, I made a full investigation and assessment of damages. Kumalae ukuleles are known for having almost paper-thin wood on the body, and the split sides and broken top showed this to be true. The large side split had most wood intact, but pushed in, and a little had broken off and was lost.

The top had a few places where glue joints had failed, which made it an easy decision to remove the top.

The head uses old-style friction pegs, similar to those on a violin. However, one was missing, so I would have to turn and carve a replacement peg.

Old instruments all have a tendency to fail at glue joints. The reason is hide glue. As hide glue ages, it becomes brittle, and any severe bump could cause the glue to fail, which appears to have happened to this ukulele. Sometimes, extremely dry climates, or even the changes of climates from humid to dry and back again, can cause wood joints to “pop” apart, especially if the strings are always tuned to pitch keeping strain on the instrument’s body. If an instrument is to be stored away for long periods of time, it is always best to loosen the strings.

Day 2: Top Removal & Continued Assessment

The next day, Day 2, I carefully removed the top and continued my assessment of damages. Because some areas were already open where the glue failed, I was able to take a very small, thin bladed Xacto knife and run it around the edge to pop the remaining glue joints free.

Having the body open will make it easy to close up the side cracks and apply backing for reinforcement. This also made it easier to fix the broken top.

Another thing I noticed at this point was that the neck had a slight warp to it. Unfortunately, that is a fault in the neck wood's grain pattern. Probably only a few years after it was made, the neck dried out unevenly, which twisted it a little. I've read that this happened often to old ukuleles (all brands) in the 1920s and 1930s--especially those taken to very dry climates directly from Hawaii.

Day 3: Beginning Crack Repairs

On Day 3, I began the crack repairs. I was able to “pop” the side splits back into place and squeezed glue into the joints. I used special binding tape to hold the cracks together, and mini clamps to keep them in place.

The broken top piece was easy to fix. I began by gluing very small cleats to the top underside and used pieces of scrap koa left over from other projects.

Day 4: Gluing Top Piece & Patching Side

The next day, Day 4, I glued the broken off top piece to the cleats. Again, I used binding tape and mini clamps to hold it in place. Since it was a warm day, the glue dried in a few hours and I was able to remove the tape and clamps. The cleats help strengthen the top and keep the crack from ever opening again.

The side cracks sealed very well, but a hole remained where a piece of wood had broken off and was lost. I cut a small piece of scrap koa into the shape of the break, applied glue, and wedged it in.

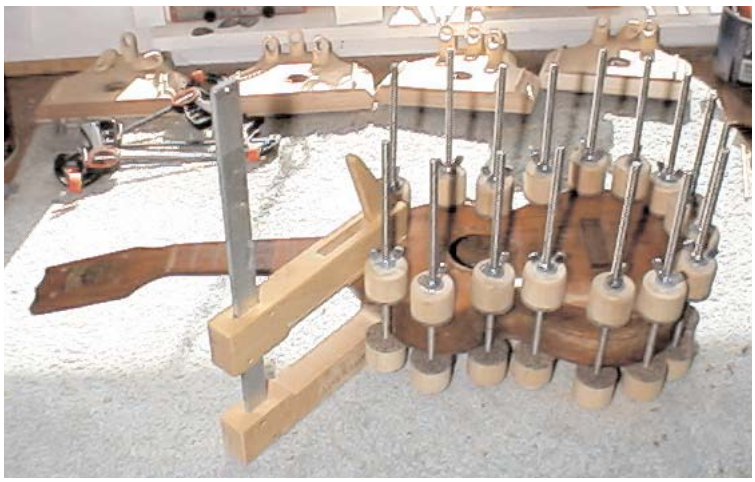
While the glue was drying, I turned and carved a replacement tuning peg. I didn't have any Hawaiian ohia wood, like the old pegs are made from, so I used a piece of boxwood, which has a yellowish coloring, but I was able to stain it to match.

Day 5: Cleats, Patches, & Top Gluing Preparation

On Day 5 I began gluing koa cleats along the side to keep the splits from opening again. The top left picture shows the cleats later in the day after I took the clamps off. The top right picture shows the glued cracks and small patch.

After scraping some of the squeezed-out glue off the outside, I started preparing to glue on the top.

Day 6: Gluing on the Top



Day 6 was the top gluing day. This is a delicate procedure, because of the thinness of the woods. The sides had to be carefully “pinched in” to fit the top properly, and the clamps couldn’t be tightened too much or it would crush the wood. The whole process took nearly an hour to complete.

Day 7: Reinstall Fret & End Patches

Day 7 showed the results of the top gluing. It all went very well, and I was able to reinstall the 12th fret where the top met the fingerboard.

I noticed a couple of holes in the end where tiny pieces of wood were missing. I took small wedges of koa, applied glue, and inserted them into the holes to patch them up.

Days 8 - 10: Fret Filing & Tung Oil Application

Now that the gluing was done, I was able to start the finishing process, which took Days 8 through 10 to complete.

I noticed early in the repair that the fret ends were sharp. This happens occasionally when wood shrinks. I did some fret dressing with a very fine fret file. This specialized file is very small and has smooth edges so it won't mar the wood and a fine abrasive flat surface that cuts through the soft fret metal quickly.

All the glued joints had to be scraped, fine sanded, and rubbed with 0000 steel wool to prepare them for the varnish. I applied several coats of tung oil varnish over the next few days.

Day 11: Finishing

On Day 11, after the tung oil had dried thoroughly, I rubbed out brush marks, bits of dust, and minor scratches using pumice and rottenstone soaked with a special mineral rubbing oil. After nearly 30 minutes of rubbing, I used a beeswax cleaning solution. After rubbing that off, I applied paste wax and polished the ukulele to a fine sheen.

Day 12: Completion

On the last day I installed the strings, tuned it up, and played “Has Anybody Seen My Gal.” It sounds great!

A few years ago I spoke to Tony Graziano, a local internationally known ukulele builder. I was just working on my first ukulele, and he told me the old story that when building a ukulele, you make the wood so thin it fails, then make another piece just a tiny bit thicker to use on the instrument. The Kumalae ukuleles are made with that tiny bit thicker wood. That is why they are so light and sound so good.

Martin Guitar Company started making ukuleles a year after Jonah Kumalae demonstrated his at the Panama Pacific International Exposition in San Francisco. In the 1920s and 1930s, the Martin styles and models were very similar to the Kumalae instruments and soon became more popular because of the Martin name and reputation. The Martins also lasted better, because the wood was better quality, aged better, and was a little thicker. Martins have a good tone, but the Kumalae has that “real Hawaiian ukulele sound.”