



Episode 901, Story 2 – Cannon Shavings

Elyse Luray: This case starts with a tube of metal shavings and a hunt for a missing Southern relic. April 12, 1861. The nation is in a crisis, and all eyes are on Charleston Harbor. For two days, the newly formed Confederate States of America have demanded the United States military abandon their positions at Fort Sumter, but they refuse. Finally, the Confederates open fire. After 34 hours of bombardment, the heavily outmanned Union troops surrender, but that defeat is only the beginning. The first cannon shot fired at Fort Sumter is the first battle shot fired in the bloodiest war ever fought on American soil. Now, an antiques dealer from Hollywood, South Carolina wonders if he has an artifact from that momentous first shot.

Robert Sarco: This ink note makes me believe it has something to do with the start of the Civil War.

Elyse: I'm in South Carolina to meet Robert Sarco.

Alright, so show me what you have.

Robert: Here we go. It's a test tube. It's got iron filings on the bottom. There's a cork, a period ink note in the middle and this top cork to protect everything. It reads: "Old Secession was rebored at the Charleston Iron Works, May 4th '99 and fired by Palmetto Guards Camp UCV in honor of UCV reunion, May 10th, '99."

Elyse: Okay, so have you ever heard of Old Secession?



Robert: Well, Old Secession didn't mean anything at all when I first read that, but when it said "rebored," I knew then Old Secession was a cannon. They rebore them when they're going to fire them again to keep the shell from jamming in it and exploding the entire cannon.

Elyse: Who was the Palmetto Guard?

Robert: The story of the Palmetto Guards was told to me orally before I could even read or write.

Elyse: Robert says the Palmetto Guard was an elite group of militia soldiers defending Charleston Harbor in early 1861.

Robert: In my opinion the first shot that precipitated the Civil War was indeed fired by the Palmetto Guards from what I think was Old Secession.

Elyse: What exactly do you want me to find out?

Robert: The iron filings in here. Do they really belong to Old Secession, the cannon that fired the first shot of the Civil War?

Elyse: Alright. Well, I'm always skeptical about letters that are put with antiques. You can't assume from an appraising point of view because you have a period note and period shavings that they're together. I also am probably going to have to do some testing on it. Is that okay?

Robert: That's fine as long as it's not too invasive.



Elyse: Okay, I'll take good care of it.

Robert: Thank you.

Elyse: From past investigations, I know that many Civil War cannons were made from iron. If the shavings are iron they would be magnetic, and they're moving, so it's definitely iron or something that's magnetic. It does say Pyrex on here and I know that Pyrex was made in the late 1920s for kitchenware, so my guess is that this was probably placed in this tube many, many years later. Looking at the note, let's see what I can see. The style of the writing looks correct to me. It's indicative to what you would expect to see in the late 1800's. Did Old Secession fire the first shots of the Civil War? I'm meeting the director of the South Carolina State Archives, Eric Emerson, at Charleston Harbor.

Eric Emerson: Let's step up on the battery and get a better view of things.

Elyse: Cool!

Eric recounts how the battle that thrust Charleston, and the nation, into war had been a long time coming. Lincoln's 1860 election and opposition to slavery in new territories prompted South Carolina to secede from the Union. Six more Southern states followed, and by April 1861, Charleston Harbor is tense with the threat of violence.

Eric: Confederate forces here, were preparing to bombard Fort Sumter which is just out at the front of the harbor there.



Elyse: Okay, I see it.

Eric: And so Fort Sumter was a federal installation, and they had refused to surrender as all the other federal installations in Charleston Harbor had surrendered. And so, this young Confederate government decided that they needed to bombard the fort before reinforcements arrived. And so on April 12, 1861, they began their bombardment of the post.

Elyse: At 4:30 in the morning, the Confederates opened fire. The siege would continue for 34 hours. Alright, so here's the piece. Our contributor thinks that these borings came from the cannon that fired the first shots of the Civil War. Eric can confirm the Palmetto Guard's connection to Charleston Harbor.

Eric: The Palmetto Guard actually took part in the bombardment of Fort Sumter.

Elyse: He says there are reports of the guard firing off warning shots at Union supply ships earlier that year. But who shot first in that decisive battle of April 1861?

Eric: Well, no one knows which cannon fired the first shot on Fort Sumter. Old Secession fired a first shot of a different kind that was just as important.

Elyse: What do you mean?

Eric explains that the editor of the Charleston Daily Courier bought a cannon salvaged from a Spanish ship many years prior to the war. He's never seen any



images of what came to be known as “Old Secession,” but it was reported to be a six pounder – weighing almost half a ton and measuring over five feet long. The cannon could fire up to 1500 yards, but Eric says “Old Secession” earned its real fame off the battlefield. The gun was fired each time a state seceded.

Eric: Old Secession’s most famous shot was when it was fired to announce South Carolina’s secession on December 20th, 1860.

Elyse: So it wasn’t used as a weapon.

Eric: Exactly.

Elyse: It sounds like this cannon was pretty symbolic to the South.

Eric: Very much so, and I’d like to show you where it was located just a few blocks from here. Okay, we’re at the corner of Broad and East Bay and Old Secession was located just to the north of the old Exchange building, and whenever it fired, people would rush into the streets to celebrate right here in front of this building.

Elyse: But Southerners weren’t the only ones heeding the cannon. “Old Secession” was heard around the country.

Eric: This is actually from the *New York Times*. One of the reporters that was here during the Secession crisis, “I naturally felt curious about this famous piece of metal.” Charleston was viewed as this center of rebellion. This center of intransigents, and they viewed this cannon as a symbol of that as well.



Elyse: Old Secession remained an important symbol during the war. But by late 1863, as the Confederates suffered reversals on the battlefields at Gettysburg and Vicksburg, the cannon was in danger. Charlestonians began to fear for their safety and for their symbol of defiance.

Eric: The cannon's taken and it's buried so federal troops can't get possession of this really important symbol, and then after reconstruction, the cannon's dug up and it's kept here in Charleston.

Elyse: If it's here in Charleston, perhaps I can compare the metal against my shavings...

Do you know where the cannon is now?

Eric: We don't know where Old Secession is. It falls out of the record around 1910. It is missing.

Elyse: But Eric has an idea. He believes the "UCV" on our note refers to the United Confederate Veterans.

Eric: I think you should visit the Confederate museum here in Charleston which has great resources regarding the UCV.

Elyse: This museum houses artifacts of the Civil War donated by Confederate Veterans and their families.



June Wells: Hello! Hello!

Elyse: Hi June.

June: Well, hello! Welcome to the Confederate Museum.

Elyse: Curator June Wells confirms that the UCV on our label almost certainly refers to the United Confederate Veterans, a group formed in 1889.

June: They're the surviving actual veterans from the war, they honor their other veterans that were no longer alive.

Elyse: And why did it form? I mean why 30 years after the Civil War did they feel this need to have this group?

June explains how in the nearly 25 years since the war's end, the veterans had lived through a tremendous amount of change, including occupation by Union troops and federal rule.

June: The Confederates could not wear their clothing unless they cut the buttons off. They could not meet more than three together in the street.

Elyse: No disrespect, but they lost the war.

June: They lost the war!



Elyse: When federal troops left the south in 1877, the freedoms that African Americans had fought for during the war were slowly eroded and a structure of Jim Crow policies emerged. But June explains how the United Confederate Veterans were largely organized to provide support for the disabled veterans, and bear witness to their wartime experiences.

June: They were the survivors. They came together to let the world know about their side of the war. They were getting their history, their cities all back together. When they had the reunion here in 1899, 30,000 veterans came.

Elyse: June says the veterans resurrected the symbol of that era: Old Secession.

June: When the veterans had their reunion in 1899, they shot one more shot from the same cannon. I have something I'd like you to see, if you'll just follow me.

Elyse: Tucked away in the museum, is my first chance to see what Old Secession may have looked like. Confederate veteran's reunion, Charleston, South Carolina, May 10, 1899. Borings of Old Secession. that's almost exactly what it says on my piece of paper.

June: Exactly.

Elyse: Wow. And the borings are inside?

June: The borings are inside.

Elyse: Oh, wow!



June: I think it was a souvenir. It probably went just to the officers, the special people at the reunion.

Elyse: You know, I'm just wondering if I could compare scientifically the ones that I have -- my borings, to your borings? I could borrow some of them?

June: We might let you borrow it, just a few.

Elyse: I invite Mike Drews, director of the Clemson Conservation Center, to join us back at the museum. Mike and his colleague Liisa specialize in metal archaeology and restoration. They'll analyze both samples of shavings to find out if they're a match.

Mike Drews: This is a hand held XRF spectrometer, and with it today, we hope to determine what the shavings are made of.

Elyse: Tell me how the XRF works.

Mike: What this instrument allows us to do is determine what elements are present in the sample.

Elyse: Mike explains he'll bombard our samples with x-rays in order to reveal their atomic make-up.

Liisa Nasanen: So this would be the museum sample.



Elyse: By analyzing the radiation from the samples, Mike can determine exactly what elements are present.

Mike: That's the energy of the x-rays that came out of the sample.

Elyse: Next this is Robert's. What do you see?

Mike: Well, when I compare the two spectra they are very similar. I'm seeing basically what I would expect to see for a sample of Civil War era iron.

Elyse: Alright. Well, that's good.

Mike: ...And the typical other kinds of things you might find, a little bit of copper, little bit of zinc.

Elyse: The samples are almost a match, but Mike spots a discrepancy.

Mike: Two new peaks that are present in the museum sample that weren't present in your sample, and if I click on my little data analysis, I get a perfect match for mercury.

Elyse: Mercury? Is that surprising?

Mike: If it had mercury in it, it would be because it was exposed to mercury in some way.

Elyse: So you don't think they could have come from the same cannon?



Mike: These two samples based on XRF analysis are not identical.

Elyse: So that means that my borings probably didn't come from where I thought they did?

Mike: That's a real possibility.

Elyse: But something is still gnawing at me. The writing on our note almost perfectly matches the wording on the museum's envelope. Is there any way one cannon could produce two shavings that don't match? I'm taking a detour to Pennsylvania to visit Jeff Stafford. He repairs and restores cannons. I've explained my dilemma to Jeff and he says he has a few things to show me that might help.

Jeff Stafford: Well this is about as close to Old Secession as you're going to find. It's an 1827 six pounder.

Elyse: Jeff's cannon predates Old Secession, but he says it's very similar and still shoots.

Jeff: Alright, we're going to come around here, get the powder charge.

Elyse: Get the powder, right.

Jeff: That's the powder charge.



Elyse: Jeff explains that since Old Secession was fired to spread news, a powder charge, rather than a cannonball, would likely have been used.

Jeff: Now we want to ram it down the bore, make sure it's seated. The primer goes in. We hook up the lanyard.

Elyse: Right, and I'm going to pull it, right?

Jeff: Pull it hard!

Elyse: Wow!

Jeff: Works every time!

Elyse: Oh, I love it!

But it's the reborring process, the way our shavings were produced, that Jeff says may unlock our investigation.

Jeff: Okay, the cannon barrel would be in a lathe in a chuck. This is called a chuck. I just you know put the chuck in gear. Bring your tool bit in.

Elyse: Oh neat! Those are the shavings.

Jeff: When you're cutting metal, the tool bit gets hot and you want to keep it cooled off so it doesn't lose its edge. You have to use a lubricant on the tool.



Elyse: Did they always use lubricant?

Jeff: Yeah. What they probably used was a mixture of whale oil and lard.

Elyse: What Jeff explains next is something Robert is going to want to hear.

Robert, what fun! It's always a good story when you get to shoot a cannon. So thank you very much. The first thing we should talk about is Old Secession. You had asked me did it fire the first shot of the Civil War?

I tell Robert about the role the cannon played in announcing the secession of South Carolina and the other Southern states.

Although we can't claim that it fired the first shots, it certainly fired some really symbolic shots during the Civil War.

Robert: That's fantastic.

Elyse: I want to share with you something I found at the Confederate Museum.

Robert: "Boring of Old Secession... Charleston, S.C." and of course the date in the note.

Elyse: It sounds like your letter.

Robert: Absolutely. Almost word for word.



Elyse: I explain how his shavings did not perfectly match those at the museum.

Robert: Oh, my. That's very disappointing.

Elyse: But, I made one more stop to try to figure out the discrepancy.

Jeff: And what they would do is they would mix mercury with the whale oil and lard so it wouldn't go bad.

Elyse: So the mercury was used to keep the lubricant from spoiling?

Jeff: Right.

Elyse: But why would some shavings have mercury and some shavings wouldn't have mercury?

Jeff: After it ran out of lubricant and before you re-lubricated it that's when you'd get a chip without mercury in it. In my opinion it makes sense that one chip would have traces of mercury and one chip wouldn't.

Elyse: While we can't confirm our shavings are from "Old Secession", it does seem probable.

Robert: That's unbelievable.



Elyse: I think you own a very unique and rare artifact. The cannon was not only symbolic to the South, it was symbolic to the North. it really has a strong place in history.

Robert: Having this artifact is such an honor.

Elyse: After the cannon's disappearance in the early 1900s, some suspect it was melted down for iron. Others believe it was stolen, and is tucked away in a back room somewhere.