## LE ROY PENNYSAVER & NEWS - MAY 5, 2013 Lapp Exhibit Opens

## by Lynne Belluscio

Last night I received the bad news that I had lost my bid on a giant Lapp insulator. It had caught my eye because it was a beautiful brown glazed "multipart" high tension insulator. I suspect it was made before 1927, but until I had it in my hands I couldn't be sure.

The starting bid was \$65 but the seller said that it would have to be picked up - - in Texas. So I e-mailed a couple of friends in Texas, but they lived too far away to help. So I e-mailed the seller and asked if he could get an estimate to ship it UPS. He e-mailed me back and said it would cost \$50. I gulped, but put in a bid - - and it was the only bid until 5 seconds before the auction ended and then robo bidding took over and we lost it.

Maybe I should look at the fact that I saved the Historical Society \$165. And maybe another one will turn up. Never the less, I've acquired a number of old Lapp insulators for the exhibit and the Lapp Company is letting us borrow four unusual insulators. I'm still looking for three shapes that were used only for telephone wires. They are shaped like the glass insulators, and have a narrow groove, but are made from the brown glazed porcelain. I've purchased one on eBay, but I can't prove that it was made by Lapp.

The Lapp Exhibit will open on Sunday, May 5 after the annual meeting of the Historical Society at 2 pm. Anyone can stop by LeRoy House for some refreshments and a chance to see the story behind one of LeRoy's oldest industries. I have had a great time doing the research, both on the Lapp family and the Lapp Company.

I continue to marvel at the innovations that the Lapp Company made to the industry. It started with the elder John Lapp (John S. Lapp's father), who had worked with Fred Locke – the father of the porcelain insulator - on early designs and manufacturing. He knew the business of making porcelain insulators and was in on the ground floor when the industry switched from dry process to



wet or "plastic" process. John also seems to have been the man behind the "wobbler", a machine that put the grooves into the pin insulators. His innovative machine reduced production time.

Grover Lapp, John S. Lapp's brother, solved the problem that had plagued the production of porcelain for centuries. It was the custom to "age" clay before using it. But aging the clay only produced bubbles and air pockets. In insulators, this caused major problems. Grover Lapp designed and patented a vacuum process that removed the air from the clay making Lapp insulators superior to many others.

Probably the most innovative design that the Lapp Company produced in the 1920s was the station post insulator. Brent Mills wrote in his book, "Porcelain Insulators" that John S. Lapp and his brother Grover really understood porcelain – its advantages and limitations. However, one of their ideas literally blew up. They designed a parallel-sided column that was hollow. It tested well at the factory, but when installed by the Alabama Power Company the current leaked into the center and the insulators exploded.

Not to be discouraged, a few years later, John designed a closed end post insulator and discovered that in addition to providing the type of service they wanted, it also produced no radio interference. The design of these post insulators were so radical, that Lapp's competitors mounted a tremendous attack on the whole post design. They claimed that anyone had to be out of their mind to even try one of Lapp's post insulators.

But Lapp knew better and in 1934, post insulators were included in their catalogue. The evolution was slow. As Mills points out, the success of the post insulator was due to Lapp's ability to sell the idea. Post insulators were more expensive, but once they were installed, they clearly out performed the old pin-type insulators. Today, post insulators are considered standard throughout the United States.

Lapp continued with innovations and was known for custom porcelain work. During the 1940s, Lapp was able to make a porcelain coil. Some coils were made from hollow porcelain pieces, 30 feet long. This design was used in the Manhattan Project and the development of the atomic bomb. Lapp received an order for 2,000 porcelain coils and was able to ship them in the required time. Another company, in that time was only able to complete 4 of the 2,000 order, and Lapp easily made up the difference.

As I mentioned a couple of weeks ago, "what's the big deal about insulators?" - - they are a big deal! I find myself driving down the road, looking up at power poles. I suspect if I am ever in an accident, they will suspect that I am on my cell phone, when in reality, I'm looking at insulators. You don't have to take any chances causing an accident. Just stop by LeRoy House this summer and take a close look at some pretty interesting insulators.

