



MY FAMILY TREE HAS ITS ROOTS IN WATER

Frederick R. Holley | Circuit Rider III

In my travels I come across many strange and unusual things in the field of water. My most recent find wasn't through my travels but through my family research. A family member brought to my attention an article on the Silsby Company out of Seneca Falls, NY, and a steam powered elliptical fire pump patented by Birdsill Holly, Jr. My goal was to find a connection between his family and mine.

Birdsill Holly, Jr. was born Nov. 8, 1820, in Auburn, NY, and grew up in Seneca Falls. He was the holder of 150 patents, some of which we still use today. In 1859, Holly moved to Lockport, NY and started Holly MFG Co. The plant was water powered, this being



Picture courtesy of Jim Lewis, Blair Supply

in the days before electricity, is where the Holly System of Fire Protection got its start. The system comprised 3 of his inventions, a steam engine, a water pump, and the fire hydrant. Although hydrants had been in use for years, this was the first hydrant that used the same design as modern day hydrants. Lockport, NY, was the first city to employ this system. The Holly Fire Protection

System was adopted by thousands of cities throughout the US and Europe. It was not only used for fire protection, it was also used to maintain business and residential water pressure. There were some cities that did not purchase this system, one of those being Chicago. We all have heard the story of Mrs. O'Leary's cow, how the cow kicked over a lantern and started the great Chicago fire. It is surmised that this fire would have been relatively minor had they purchased the Holly system. The system was purchased almost immediately after the fire. The system was designed to deliver high pressure water through a dedicated fire main to the fire hydrants, to cut the need for a pumper to provide the pressure. The pressure was produced by pumping the water directly into the main using his patented steam powered pump. The only remaining Holly fire system in operation is in Rochester,



Holly steam powered pumps

NY. On February 18, 1874, the city pumped a 4 inch stream of water 294 feet into the air. Water was drawn from the Genesee River through these steam powered pumps. Although steam pumps are no longer used, the idea is the same. The City of Buffalo, NY's steam water pumps from Holly Manufacturing were in operation till somewhere around 1980. Their system consisted of 5 steam powered triple expansion pumps providing 30,000,000 mgd each. Even though the Buffalo system is no longer in use, it is being preserved for future generations. The Industrial Heritage Committee sponsors public tours of this facility.

Pressure pumps were replaced with reservoirs, standpipes and elevated tanks. These were used to provide a constant flow of water under pressure, thus the modern day water systems were born. Just to think, an inventor who only completed the third grade went on to invent and patent a fire protection system that today we take for granted. What matters to most people is that they open the tap and out comes safe, fresh, affordable water. What it takes to get it there is the farthest thought from their minds.

In the end I found a connection, not just a family connection as Birdsill Holly, Jr. is my fifth cousin four times removed; there is a shared passion in making life better for people through providing Quality On Tap!

I have a passion for helping people. If I can in any way assist you please give me a call.

Fred Holley
New York Rural Water Circuit Rider III
holley@nyruralwater.org 