

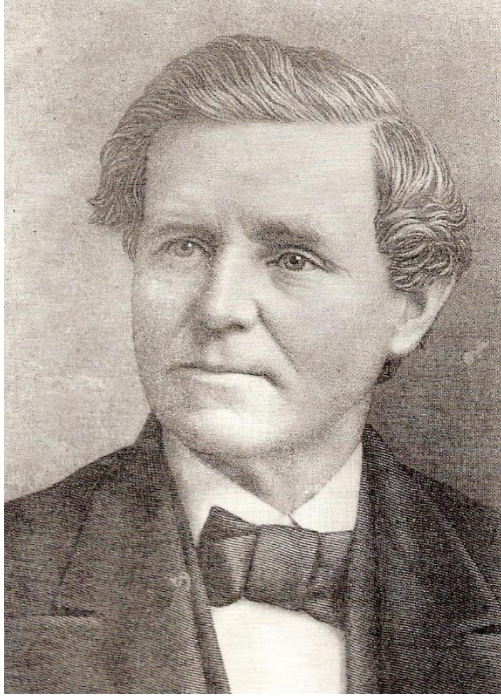
## THE HENRY DISSTON SAW COMPANY

By Bob Garay

I was fortunate enough to attend the local EAIA meeting recently at the New Jersey Tuckerton Seaport, organized by CRAFTS member Carl Bopp. The Tuckerton Seaport is a fine reproduction of a historical seaport village with all the crafts and shops from that early time period. But as a saw collector the main reason I was eager to attend was that the featured speaker was Henry Disston Jr., a direct descendant of the founder of the Disston



Saw Company. Henry Disston Jr. is the grandson of Jacob S. Disston Jr. who was President and the last Chairman of the company. Henry's father was the last Disston to work for the company, as he was apprenticing in the File Works when the company was taken over by H.K.Porter in 1955. Now I was aware of the major happenings of this world leader of saw production, but this presentation tied all the loose ends together and added new information to what I had previously known. Thus I thought it would be of interest to tool collectors to review the history of Henry Disston and the Disston Saw Company as told by Henry Disston Jr.



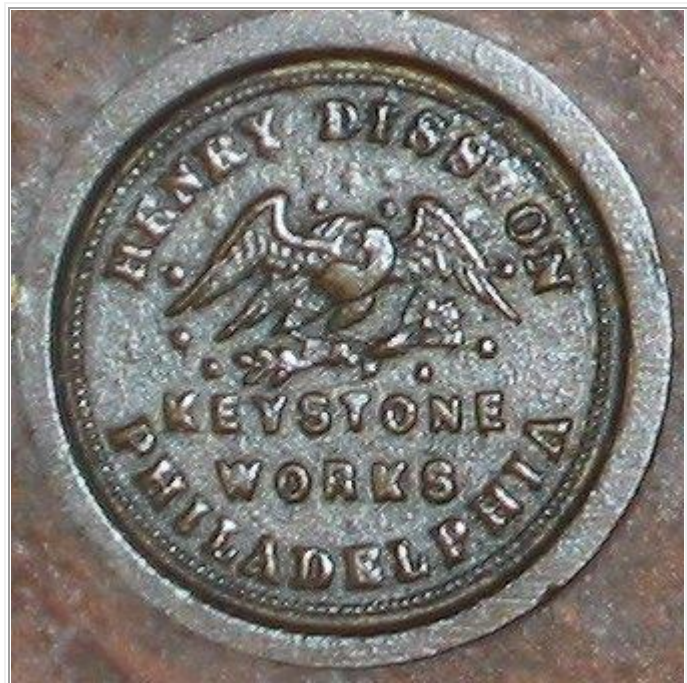
It is well known that the 14 year old Henry Disston first arrived in Philadelphia in 1833 with his father Thomas and his sister Marianna, after a sixty day voyage from England. His father had invented a lace machine and was coming to America to market it. Luckily Henry had learned the craft of mechanics, as his father passed away three days after arriving in America. Friends of the Disston family introduced Henry to the saw making business of William & Charles Johnson, where Henry apprenticed in saw making for seven years. This business ran into hard times and for back pay Henry was offered saw making tools and materials worth \$350.



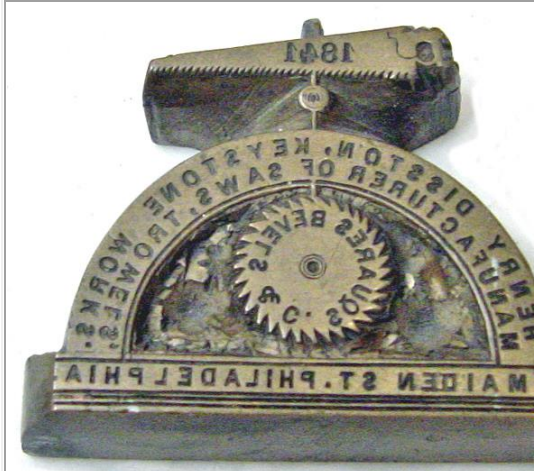
Three early Saws by the Disston Saw co. Top is a Disston & Son model No.12 with raised sawnuts in mint condition. Middle is a brass back saw with a tri-cove handle. Bottom is brass back Disston double eagle saw.

Henry decided to start his own saw making business in 1840 and opened a small shop at 21<sup>st</sup> and Bread St. Here he built his own furnace and hauled coal from the Delaware River docks, a mile away. He hired his first apprentice, David Bickley, and together produced about a dozen saws a day. It was during this time that he married Amanda Mulvina Bickley, probably a relative of his apprentice. His young wife gave birth to twins but they died within hours of birth. His wife soon became ill and also died. This left Henry distraught and penniless. He was given a \$5 loan from a friend and he went back to work struggling to make ends meet. Henry Disston not only built his own furnace, but also fired it himself and tempered his own saws. He also smithed, ground, set, and filed them. During these first years, times were so hard that he sold his saws for just one cent over the production cost. He would spend much effort proving the superiority of his saws over the English dominance. An interesting anecdote describing his early sales technique is treasured in the Disston archives.

A plainly dressed young man entered a hardware house. He called for the proprietor and asked to see a carpenter's saw. The saw was brought, and the stranger, examining it carefully, remarked that it was good for nothing. He suddenly broke the saw with a smart blow on the counter. "Who are you, sir?" asked the proprietor in some consternation. "I am called Henry Disston," was the answer, "and here is a saw that I defy you or any other man to break with similar treatment." He laid down one of his own saws. The dealer, who later headed one of the city's largest hardware establishments, said, after mentioning the incident, that the trade was convinced to buy the saws of the young manufacturer because of their obvious superiority.



Early 1840's eagle medallion used by Henry Disston Saw Co.



Above- Original 1st brass stamp used by Disston Saw Co.



Above - Stamp used on early postcard match stamp at left.

On November 9, 1843, he married Mary Steelman, a direct descendant of Daniel Leeds, who played a prominent role in the early development of New Jersey. Henry struggled to prosper in the saw business and seemed to constantly run into bad luck. He had to move his business a couple of times and lastly, in 1849, his rented shop had a boiler explosion that forced his hand to purchase his own land and build a shop.

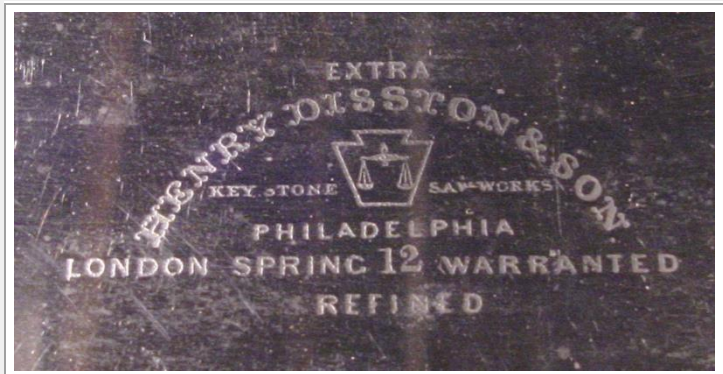


Double eagle stamp 1850's brass back saw.

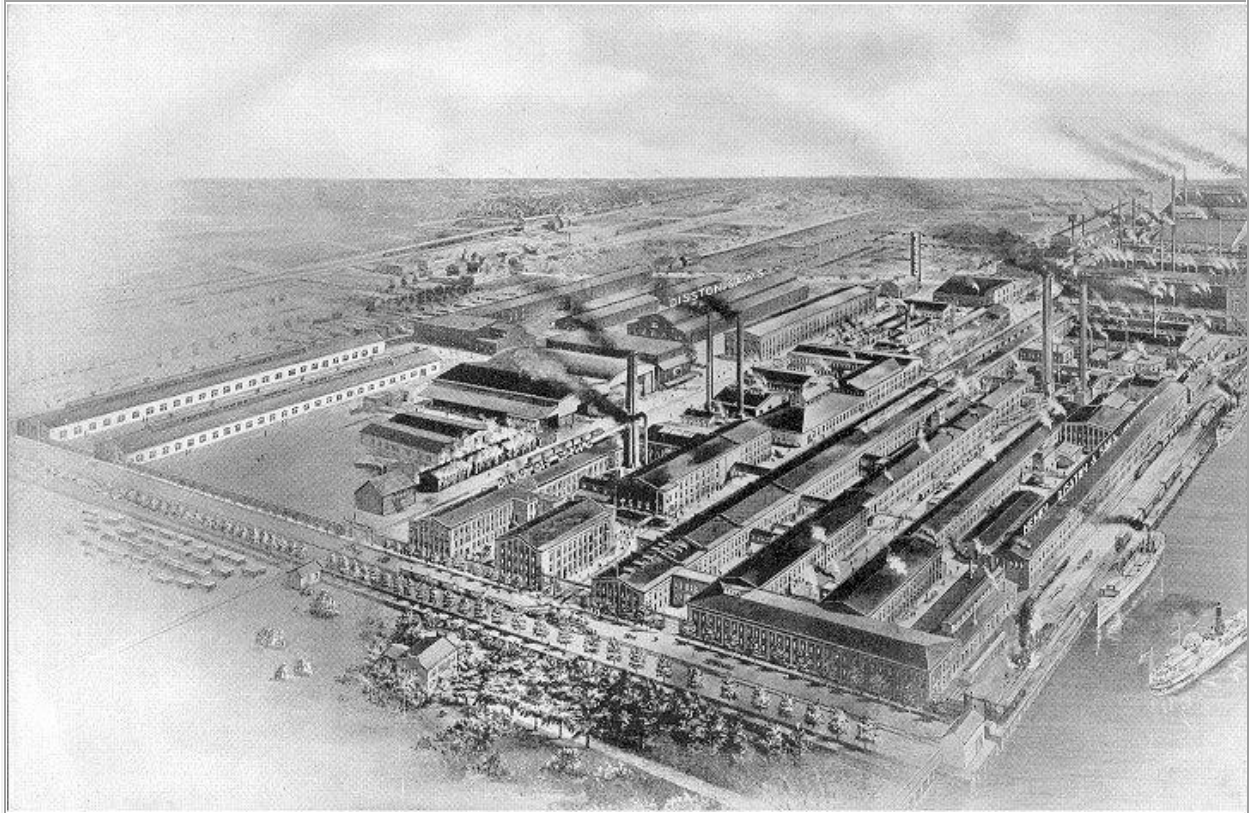
The Mexican War in 1846 spurred the demand for tools and the saw business prospered. By 1850 after ten years in business Henry Disston had come a long way, as his trademark was recognized as a symbol of excellence and dependability. He was now making an assortment of products using steam power with 65 employees. In 1855 he was the first to bring Sheffield steel workers to America to produce crucible steel. By 1859 Disston had 150 men working for him, more than any of his competitors.

In 1861, two events occurred which did much to further the success of his flourishing enterprise. The first was a tariff on foreign saws and tools, which spurred the sale of Disston products. The second was the beginning of the War Between the States. The war effort was profitable, as production was \$35,000 per month. Many Disston employees including Henry's eldest son enlisted in the war effort. Henry's son Hamilton refused an officer's commission, preferring instead to share the hardships of the men he had apprenticed with in the factory. It was

during this time that Disston started to make their own files, as they could not find any manufacturers that met their quality standards. This became another whole division of Disston's business. After the war Hamilton joined the company and the name was changed to "Disston & Son". It was Hamilton who demonstrated the merits of the bandsaw and convinced factory workers to apply its use to making handles. Instead of two men making 20 dozen handles a day, they now could make 165 dozen a day. In 1871 Henry's son Albert was brought on board, then came Horace, William and Jacob. The name was changed to Henry Disston & Sons. By this time Disston had made a name for his business nationwide with his introduction of new products, superior quality and cost-cutting machinery.



The Disston & Son etch existed from 1865 to 1871 when more of Henry's sons joined the company changing the name to Henry Disston & Sons.



Disston plant along the Delaware River during the early 1900s.



The Tacony Baptist Church is partially made from discarded grind stones from the Disston factory.

Henry Disston believed in family, and gave them the opportunity to come to America and work for the company. Starting in the late 1840s his brothers came from England with their families. Thomas and later William were partnered in the Jobbing Department. Charles partnered in the Butcher Saw & Trowel Dept. Joab Morse, whose wife was a sister to Henry's wife, partnered in the Square & Level Dept. In the end, they provided leadership that he could trust.

A believer in hard work and fair treatment of his employees, Disston shaped a working-class community around his factory. He insured the supply of skilled labor by maintaining an apprentice program. He purchased 350 acres in Tacony, PA to build a new factory away from the troubles of city life.

He incorporated in this property 500 houses for his employees with all the amenities of modern housing of the times. Disston provided Tacony with running water, sewers, gas service, parks, schools, and adequate yards to raise families. However Henry added provisions that there were to be no bars, livery stables or bells in the church steeples. This was to keep the worker focused on the work in the factory. The strong ties that bound Henry Disston and his men in a relationship far deeper than that usually found between employer and employees were knit from their common interest in their craft. In Henry Disston the men recognized a master craftsman, familiar with all of their various skills, as well as a sincere friend. That bond is attested by the employment records of many men then on the Disston payroll.

When the first Disston history was compiled, in 1920, the rolls showed 21 men in continuous service for 50 years or more; 90 from 40 to 50 years; 238 from 30 to 40 years; 320 from 20 to 30 years; 763 from 10 to 20 years, and, working beside them, 2,170 younger saw and tool makers, steadily gaining in skill and experience. Many of the younger men were sons or grandsons of the older employees. At the time of Henry's death his first apprentice, David Bickley, was a foreman and would continue faithful employment until 1890, fifty years of service.

There are other places where the name Disston has a special meaning. One concerns Atlantic City, which he recognized in its possibilities as a summer resort. He invested heavily in land and erected a large sawmill in 1872, which spurred the building of homes, hotels, and business houses and started Atlantic City on its way to becoming one of America's most popular playgrounds. He built for himself a large home, which was for many years one of the show places of the Jersey Shore, and which did much to maintain the character of the vicinity. In 1879, Henry Disston & Sons won the contract to build a 16 foot boardwalk for the length of the city. In 1879 Hamilton Disston donated land called Park Place by locals, made famous by the Monopoly board game. Today a Disston Park exists on the Atlantic City oceanfront.

Henry died of a stroke in 1878 at the age of 59. He left behind a company with strong family leadership and employees loyal to the Disston cause. His son Hamilton, at age 34, became president. In the next five years he boosted production by 35%. Hamilton had visited Florida in 1877 for a fishing trip where he was impressed with the vastness of the land. Later, in 1881, he contracted with the state of Florida to drain its southern lands, receiving ownership of four million acres of land for \$1 million. This deal made Disston the largest single landowner in the U.S. He moved to Florida for a while, working on improving his land holdings, building hundreds of miles of canals to make it livable and established the town of Kissimmee. His

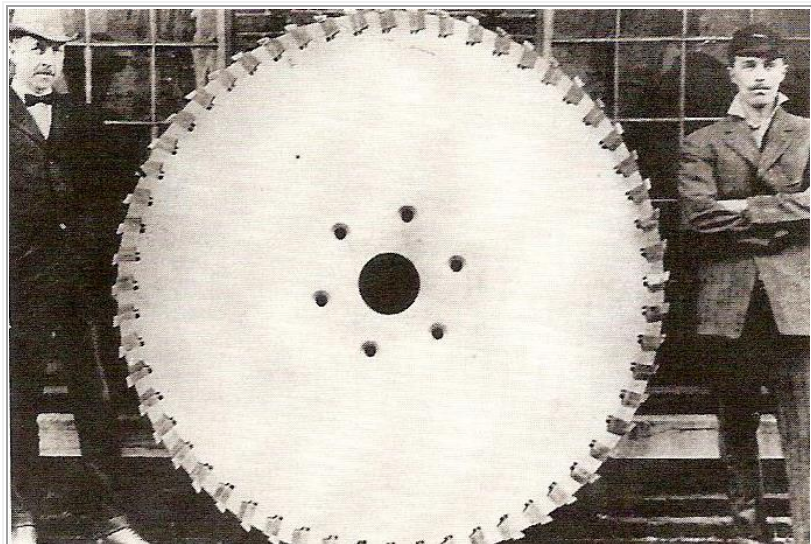


Flyer announcing land sales from Hamilton Disston's property.

ventures in Florida had persuaded many other influential Philadelphians to do the same. Unfortunately, Hamilton's reinvestment of profits in additional projects, coupled with the economic depression of 1893, produced a financial strain on his personal finances. As foreclosure on the \$1 million loan approached in 1896, Hamilton, apparently believing he had brought financial ruin to the family business, took his own life.

This left the company in the hands of Hamilton's brothers, William, Jacob S., Horace C. and his half uncle Samuel Disston. William took the leadership role, ably assisted by his brothers and half uncle. During the time of Henry Disston's leadership, profits were reinvested into the company. Hamilton had incorporated the company in 1886 and stock was distributed among family members, each collecting substantial dividends. As these dividends were paid out to Disston shareholders, it drained capital for reinvestment in the company. The Disston's had to borrow \$1,000,000 from JPMorgan to repay the loan drawn against company assets by Hamilton Disston. Money that was diverted to repay the loan and to pay Disston stockholders dividends, reduced the amount of money available for town philanthropy and workers benefits.

Again, the profits of a war bolstered the Disston Company as World War I offered many lucrative contracts. Yet, as the Great Depression wore on in the 1930s, workers saw reductions in hours and their wages in an effort to keep the factory running. Because this and other social and economic changes, the age of paternal corporate structure disappeared. As in other manufacturing industries, this was when the Disston workers unionized. Dwindling profits and the need to keep paying dividends to the family, forced marketing and cost-cutting decisions that would



William D. Disston standing to right of an inserted tooth circular saw in 1910. He became the CEO during the Great Depression.

prove detrimental to the long-term health of the company. During WWII and for about five years after, the company made much of its money selling steel, not saws. After the war, Germany and Japan both invested a great deal of money and effort in new steel mills and other factories. This paid off for them in the early 1950s when these modern plants started production. Disston on the other hand was essentially a 19th-century factory with no cash to invest in modernization.



Workers were striking every few years for an increase in pay, and the Disston family members with stock in the company wanted their dividends.



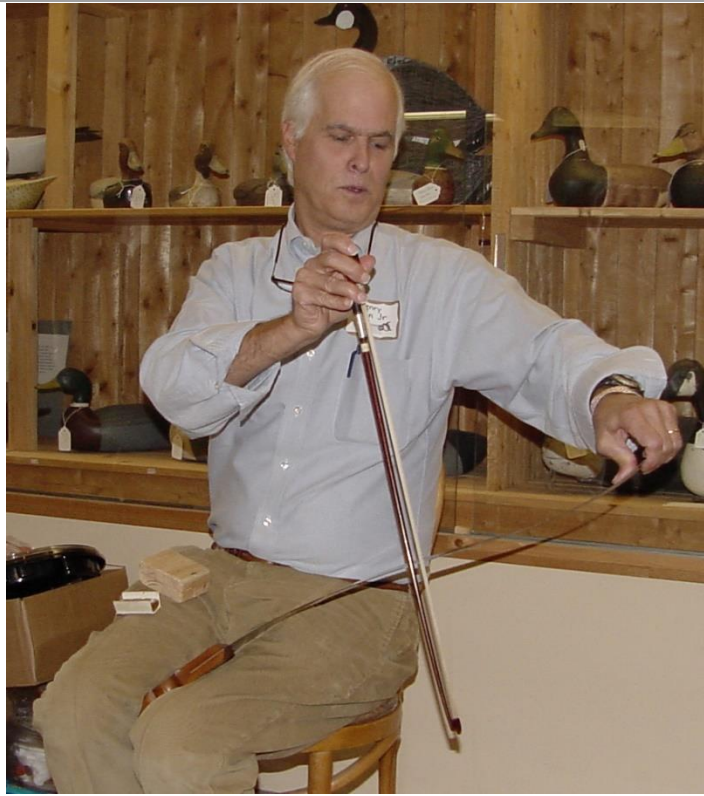
Chain saw made by Disston used by the military during WW2. It was heavy and cumbersome and led to further developments.



Tank made in 1941 at the Disston Saw works. The production of armor plate was important government contracts that bolstered their profits in hard times.

In 1947 Jacob S. Disston became president of the company and believed that the development of the chain saw held the most promise for the future of the company. Disston contracted with the Kiekhaefer Company of Wisconsin to develop a light weight engine for the saw. It was manufactured, but had to be recalled due to mechanical problems. In 1952 several Kiekhaefer employees resigned and went to work for Disston. The firm borrowed \$3.5 million from the Philadelphia National Bank for development of the saw. It was at this time that the Disston family realized that the firm needed new leadership. For the first time a non-family member, John Thompson from Roebing Steel, became president. Soon Kiekhaefer Aeromarine Motors Inc. filed suit against Disston, charging illegal employment of their executives. Because of this, Thompson discontinued the chain saw project. PN Bank called for immediate repayment of the loan. This pulled money from the Disston shareholders dividends. This action caused many of the women shareholders, who were not involved in the company, to sell their stock to H.K.Porter. Once H.K.Porter had control of the company they paid off the loans using the employee's pension fund. Quality was never the same as it was under the Disston family's control. In 1978 the firm was sold to Sandvick, a Swedish saw company. In 1984 Sandvick sold the company to R.A.F. Industries, as the empire that Henry Disston had built was just an empty shell by then.

This story summarizes how Henry Disston started in this country an orphan apprenticing as a saw maker in 1833 and rose to the largest saw manufacturer in the world. He developed not only a company of skilled craftsman, but a close knit family of employees who materialized into one of the model paternalistic communities in Tacony PA during the American Industrial Age at the dawn of the 20<sup>th</sup> century. Henry Disston created a comfortable and enriching way of life for the Disston workers and they gave him their hands, minds and hearts in return. His sons and their sons apprenticed not only in the company to continue his ideals of learning the trade from the bottom up, but they carried on his ideology of the worth of man in a modern Industrial Age. Modern and future industrialists would gain much from a study of the Disston story.



Henry Disston plays a Disston musical saw at the Tuckerton Seaport presentation.