



Society for Industrial Archeology · New England Chapters

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 Richard Coughlin, Treasurer

SOUTHERN CHAPTER OFFICERS

President (vacant)
 Vice President (vacant)
 Leonard Henkin, Secretary
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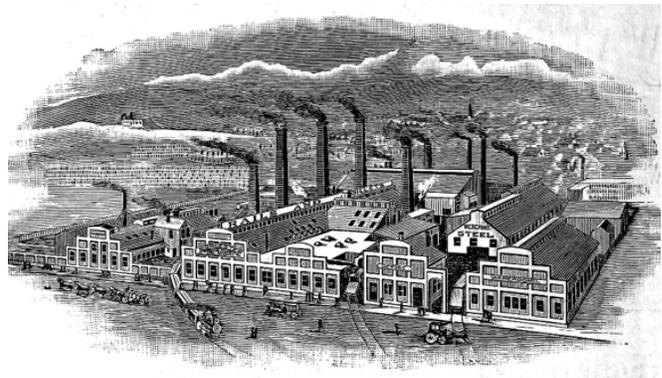
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See New England Chapters of the Society for Industrial Archeology on the Web at <http://nec-sia.org> to obtain more information and membership details.

Call for Papers for the 32nd Annual

New England Industrial Archeology Conference
Saturday, March 30, 2019* (provisional date)

at Clark University, Worcester, Massachusetts



hosted by
The Southern New England Chapter
Society for Industrial Archeology

The Southern New England Chapter of the Society for Industrial Archeology invites proposals for papers to be presented at the 32nd annual New England Industrial Archeology Conference. The conference is alternately hosted by the Southern New England and Northern New England Chapters as a forum for presenting research into our industrial heritage. The conference *is provisionally planned* to be held on Saturday, March 30th, 2019 at Clark University, 950 Main Street, Worcester, MA, in the Jefferson Academic Center, Room 218. Further announcements will be sent by e-mail once the date and venue have been confirmed.

Papers are welcomed on all topics related to industrial history, archeology, manufacturing, preservation,

engineering, architecture, etc., in New England and elsewhere. Proposals may be submitted for individual papers, team papers, or reports on works-in-progress. The time limit for each presenter will be 30 minutes. Student papers are welcomed. Presenters do not need to be SIA or chapter members.

Format: Each presentation proposal must include (1) title; (2) an abstract of not more than 300 words; (3) a brief resume of the author(s), including postal address, telephone and e-mail; (4) final presentations shall be in MS Powerpoint, or presenters may bring their own laptops for connection to the a/v equipment.

Deadline: Proposals must be received by February 15, 2019.

Send proposals via e-mail to:
Conference Coordinator,
Peter Stott at ph.stott@gmail.com
or by USPS to
P.H. Stott,
33 Shirley St.
Roxbury, MA 02119

2018 Annual Report, SNEC – SIA

The year 2018 began for SNEC last fall at an annual meeting, which followed a fine tour of historic lime quarries and also a reconstructed blacksmith shop, in Bolton, Massachusetts. The main purpose of annual meetings is to elect chapter officers for the coming year. SNEC's then president, Marc Belanger, was retiring, having moved to Nevada. During his years as president, Marc served SNEC admirably: among his activities were designing and managing a joint NEC website, organizing NEC conferences when SNEC was the host, and handling email distributions for both chapters. Marc also contributed to the field of IA through his research publications and photography. But, by the time of the meeting in Bolton, no members had offered to run for the offices of president or vice-president. Indeed, the office of vice-president has been unfilled, officially or practically, for many years. The vice-president is responsible for organizing tours and activities for members. No tours occurred in 2018, until Nov. 3.

SNEC's 2018 annual meeting took place on Nov. 3,

following a fine tour of a museum, historic mills, and infrastructure (1840's dam and canal), and the former office of the Essex Company (now the Lawrence History Center), in Lawrence, Massachusetts. Once again, there were no candidates for the offices of president and vice-president. The incumbents in the offices of secretary and treasurer/registrar offered to continue to serve.

The meeting, consequently, focused on the future of the chapter. By the end, we agreed to carry on for now, without a president and vice-president, as long as some members volunteer to do tasks that would have been done by these officers. One task is organizing the 2019 New England Industrial Archeology Conference; Peter Stott volunteered to take this on. Another is to work on tours. Some members hopefully will help with this. Marc Belanger will continue, for now, managing the NEC website and handling NEC email distributions. Also, we will try to form a committee to discuss, and consider options for, the future of SNEC, and indeed the field of IA: Jeff Howry, Ron Klodenski, Peter Stott, and Sara Wermiel will work on this. Leonard Henkin was elected secretary and Sara Wermiel was elected treasurer/registrar.

But the chapter has to articulate a purpose that will reinvigorate it and encourage member participation. Without this, neither the chapter, nor the field of industrial archeology, can be sustained. So, I'd like to explain why anyone should care about SNEC and IA, and therefore take a turn serving as a chapter officer or volunteer to help out.

Why Care about Industrial Archeology?

Industrial archeology as a field of study and knowledge is unique and important. While it overlaps with other fields – notably history fields (e.g., history of technology, construction history, business history, public history) – it focuses on physical remains of industrial sites and immovable heritage on the ground. This concern with structures and site makes it different from other fields. The physical remains of industry – historic factories, transportation infrastructure and buildings, mining sites, and so on – are important sources of data for understanding industrial development. Considering that the rise of mechanized manufacturing and associated industries has created the modern industrialized world, understanding the origins and development of industry is central to understanding our present. Moreover, some of these remains should be preserved so

future generations can experience and learn from them. Studying, interpreting, and protecting historic industrial properties are important purposes of the field.

However, industrial archeology is a field of amateurs. Members of the New England chapters and the national organization (Society for Industrial Archeology) come from diverse backgrounds; there are very few people who call themselves “industrial archeologists.” This means, on the one hand, the field is welcoming to all who are interested. On the other, it puts a burden on members, who have jobs and other interests, to keep it going. Without participation, the field withers.

Much has been accomplished with respect to identifying and researching historic industrial sites since the field’s inception in England roughly 60 years ago. In the U.S., through local surveys of historic resources, which include industrial sites; National Register nominations of industrial sites; IA-specific recording projects; state transportation surveys (of road bridges) and Section 106-required recording; scholarly research; etc., knowledge of industrial sites has expanded and publications on IA topics have multiplied.

Nevertheless, there’s much still to learn. For example, while many Massachusetts communities have initial surveys of historic resources, which includes industrial sites, these are often cursory and out-of-date. The landscape of our region is filled with extant properties and subterranean remains that can inform us about the history of the town in which they are located; industry, utility, or transportation system they were part of; the lives of people who built, worked in, and lived near them. There are so many stories yet to be told, many details to be discovered.

And there’s much to do in the way of helping to preserve industrial heritage. While many old industrial buildings are being reused (e.g., factories converted to residential lofts or office space) and thereby preserved, the obstacles to preserving obsolete industrial sites persist. These structures and sites need advocates. An active SNEC is the best way to support the field of industrial archeology in our region. But whether it continues or not depends on you.

Sara Wermiel, Treasurer and Registrar, SNEC

NNEC President’s Report Fall 2018

The annual meeting, at the Historic Coal Silos at Griffin Lumber in Hudson Falls, NY, was held at lunch. No new business was brought forth, and no nominees were presented for offices. However, one person did volunteer to fill the position of Treasurer if it were open. The current treasurer was not present, so we thanked the volunteer and passed his name on to Rick Coughlin. Rick’s report follows:

Treasurer’s Report:

Bank balance as of August 31, 2018: \$4,043.38;
2018 Annual Paid Membership: 33
Life Membership: Estimated at 30 members.
I suspect the drop in membership (and reduced bank balance) may be because I was not available at the Spring tour in June to request some tour attendees to please pay their 2018 annual dues, and at the Winter Conference in Plymouth I was overwhelmed with attendees and could not both collect the conference fee and simultaneously check the membership roster and ask attendees for annual dues if they haven’t been paid yet.

Last year at the Spring tour in Laconia I was able to request dues payment for attendees, and that greatly increased our paid membership for the year. Also, I believe we had more members present at the 2017 Spring tour than the 2018 Spring tour. Therefore, if I cannot attend a Spring tour, we should have someone present requesting annual dues. Also, at our Winter Conferences we need two people at the reception table, one to collect the conference fee and the other to collect dues.

(I, the president, request that volunteers help out with this important collection need.)

We have a very interesting tour opportunity for a historic and prominent railroad crossing/terminal. However, it’s way up near Island Pond, VT. I asked, at the fall tour, how many would be willing to drive that far to see it and was surprised at the positive response. See the information in the following *Future Tour* article. However, that will be planned for later on as we just went all of the way to New York State this fall. The upcoming spring tour will be closer, in Brattleboro, VT.

David Dunning, NNEC President

NNEC-SIA 2018 Spring Tour Report

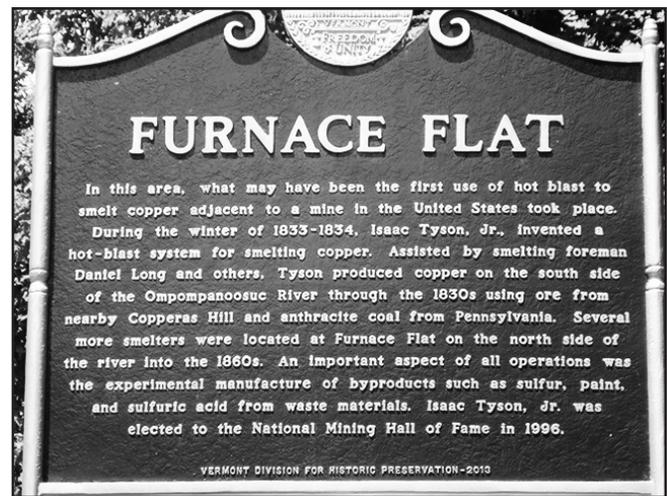
The Northern New England Chapter's June 9 Spring Tour visited three Vermont sites: the historic Ely Copper Mine in Vershire, a process tour of DW Plastics manufacturing plant in Bethal, and the Green Mountain Feeds facility, also in Bethel.

Ely Copper Mine

The site of the Ely Copper Mine is in Vershire, VT. That town was named as being near the border of VT and NH. Vershire is a ghost town today but once had about 600 people. Copper was discovered there around 1812 by a young girl named Betsey Richardson. Henry Barnard bought two farms in the general area of where the copper was discovered, at about 1820. In 1853 Barnard and five fellow New York investors incorporated the Vermont Copper Mining Co. They attempted a little work that fall and winter. The copper was first used to dye sheep's wool.

In the spring of 1854 they hired Thomas Pollard, a 38-year-old Cornish miner to supervise the work. They produced a concentrate of 8-10% that was shipped to the smelters at Point Shirley, near Boston, Mass. In August of 1856, an order for 500 tons of ore was delivered to the Humphreysville Copper Company. Ore was brought to the mill by oxen at first, using carts on rails. After processing, the oxen hauled the copper down to train platforms in Ely-Depot.

The mine was closed briefly in the spring of 1855. In 1856 they started looking for investors and other sources



The Vermont historic site marker at the Ely mine.

to make needed upgrades to the Vermont Copper Company. 1860 showed, for the first time, that all expenses had been paid; a small mortgage had been paid; and the company was out of debt.

In 1864 Smith Ely became president of the Vermont Copper Company. In May of 1868 William Long had ready roast beds for the copper, four furnaces in a 106 by 62-foot building, and other buildings. Workers at the mine totaled 130. In 1868 the company produced 1,669,210 pounds of 34 percent matte copper and shipped 3,341 tons of concentrates. Annual sales totaled \$214,020 in 1868. In January of 1869 the directors declared a \$100,000 dividend.

Census records of 1880 showed 209 Cornish and 281 Irish workers. Payroll records from November 1880



Some of the tour participants at the Ely mine.

showed 851 workers in all. In 1880 the mining village of Ely had 50 houses with 100 tenements, a giant smelting shed, a large store, two churches (one Methodist and the other Catholic) plus all the other installations required to conduct a mining operation.

In the 1870s, the boom years, the smelting plant was expanded to 24 furnaces, and the plant was 700 feet long. A dam was built to supply water to the boilers and to the furnaces. Also, a saw mill, gristmill, and stamp mills were built. Roast beds were expanded to 900 feet, and the mine was expanded to 3000 ft. A 1000 ft. vertical tramway was built from the clobbering and dressing house to the roast bed. Exhaust tubes let the fumes go up to the top of the mountain (to drift away). By the end of the 1870s, there were 1000 workers at the mine. A Post Office was set up in 1871.

In 1880, the market crashed; production numbers for 1880 were 3,186,175 pds; in 1881 they were only 2,555,970 pds.; in 1882 less than 1,000,000 pds; and in 1883, less than 500,000 pds were produced. Some of the causes were: Smith Ely's failing health, and the death of his wife. Ely's grandson was appointed paymaster for the mine. There were also lawsuits new and old, disputed boundary lines, and ownership issues and in-fighting among the principal people who were running the mine. Then there were more lawsuits between Ely and Cazin, principal stock holders. They were not paying the workers, and riots of the miners broke out in 1883. Five companies of the VT National Guard were called out, and the mine closed in 1883. Cazin entered, and he ran the mine until 1889. He tried to make improvements, but nothing worked. Otto J. Krause, an investor for Cazin, tried to get things going again until 1893, but the mine closed again.

George Westinghouse took over from 1900-1907. The mine was used to experiment with furnaces and new ways to produce low grade copper cost-efficiently by taking raw ore and smelting it in furnaces. In 1905, the mine closed for the last time. During the years of 1914-1919 a flotation mill was built, and all of the concentrates were sent to Stratford to be processed. During the years of 1943-1946, tailings from the piles of waste at Ely were hauled to the Stratford mines to keep their production up; this would be the last mining of any sort for the Ely mines.

In the early years, much of the labor was performed by young boys. With growth, workers were imported from Ireland and other countries (as noted above).

The Irish, not being a docile lot, would not tolerate the unsafe working conditions (especially for boys), long hours and late pay. Around 1883, the price of copper was falling, and management could no longer afford to pay the men. At one point, the workers threatened to blow up the mine. With that threat, the governor called in the National Guard (as noted above). When they arrived, everything was calm. The miners showed the soldiers their poverty, and the soldiers gave their own food to the miners and their families.

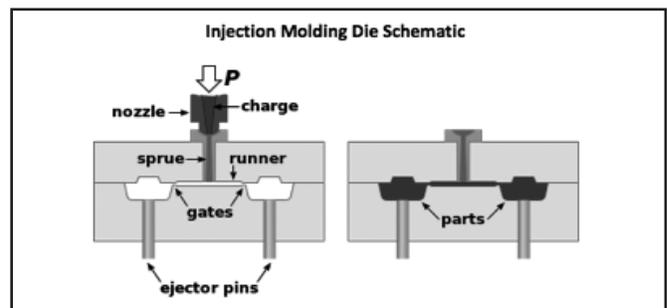
GW Plastics

After a good lunch at historic Eaton's Sugarhouse, we toured nearby GW Plastics. This is a newer facility than their headquarters plant in nearby Bethel. They make plastic parts for other companies using the injection molding process. Their primary market is companies that make plastic medical and healthcare products. GW Plastics' injection molding presses can squeeze melted plastic pellets into intricate molds using from 35 to 400 tons of force.



The GW Plastics plant in Bethel, Vermont.

In the image below, black is the molten plastic being forced into the mold under extreme pressure. When the plastic has solidified, sped up by cold water rushing through tunnels surrounding the parts, the upper and lower halves of the mold are separated. Stationary ejector pins push the parts out of the tight cavities. Then the mold halves close quickly to receive another injection for the next parts. After molding, the sprues



and runners and gates are cut off. At the end of the order, the mold is removed from the press and another mold is mounted in for the next job. It will have different settings for pressure, temperature, cycle time, etc.

Green Mountain Feeds

Everyone driving through Bethel, Vermont, sees these tall silos on the skyline but not everyone knows what they are. Green Mountain Feeds supplies organic feeds to farms throughout Vermont and neighboring states. That is, to those farms that prefer certified organic feeds. By certified, they mean free of pesticides, herbicides, fungicides, hormones, antibiotics, preservatives, GMOs, animal by-products and animal protein products.

Feed components arrive by trains and trucks and are fed into bins and silos. The photos show the silos and the large computer screens where the feeds are blended per customers' orders.

David Dunning
NNEC President



Northern New England Chapter Spring Tour participants view the Green Mountain Feeds Company's towers and silos in Bethel, Vermont.

Planned NNEC-SIA 2019 Spring Tour Brattleboro, VT

Plans are underway, but your input and other ideas are needed. Featured will be the *Estey Organ Company*. In its time, Estey was the largest musical organ manufacturing company in the world. After burning down, it was rebuilt with slate shingles on the outside for fire protection. Some of the buildings still exist, and there is now also a museum.

Lester Dunklee's Machine Shop has been preserved by his family. It features machinery driven by leather belts from overhead and very interesting old tools.

West River Railroad Museum & Newfane Railroad Station: Not just another train station, this has a lot of very unusual and very interesting history.

C&C Wholesalers is an enormous grocery wholesale company that supplies stores all across the country. This would be another process tour. However, we haven't been able to get in yet; it's just on our wish list. So.... We're still looking for ideas (from you) in case we don't get it.

David Dunning
NNEC President

An Invitation To A Future Northern Vermont Railroad Tour

This is information that was sent to us, inviting the NNEC up for a tour. Would it be worth a trip up there?

“Good evening David [Dunning]:

I was doing some research today on a 1896 bridge in North Troy, Vt. This bridge is still in daily service and is a superb example of railroad engineering. My friends at the Island Pond Historical Society are quite excited to host you at some time in the future.



“We can put something together. I would focus on Island Pond, which was the center of activities of the Grand Trunk Railroad. The Island Pond Historical Society occupied the old railroad station seen in the photo until two weeks ago but has now moved to a new owned building nearby. But the station is acces-



sible to us, the rails are still here and twice daily the Central Quebec and Maine Railroad still operates here. The old overpass has been demolished but a truncated version was erected and is a pleasant way to go from the depot to the higher part of town with nice views of

the lake. In the vicinity there are still railroad bridges and other structures of interest and we could incorporate a walking tour along some of the existing railroad infrastructure in nearby Newport where a large part of the original spur, some bridges and two tunnels are still original to the 1920s. It would give us pleasure to see you here for this and we can provide two or three local historians to (briefly) speak about the Grand Trunk Railroad, its impact on the area, etc.

There is also a wonderful restaurant, the East Side Restaurant in Newport, that has plenty of space to host the group. This restaurant sits on the exact location that once was the largest lumber operation in Northern Vermont and where it is located now was a massive rail yard for the lumber operation and a steamship wharf to accommodate the boats that drove the lumber booms into the bay.”

Received by David Dunning
NNEC President

The Ashton Valve Company

1. How many of you have heard of the Ashton Valve Company?
2. How many of you remember seeing an Ashton Gauge or Valve in the field?
3. How many of you have experience with a boiler?

Two years ago I knew next to nothing about the Ashton Valve Company. I remember my father mentioning the name a few times over the years but he knew little about the company outside of a few family names and the fact that there was a building in Cambridge with “Ashton Valve “carved on it.

I was sitting with my mom and dad talking about my mom’s side of the family and what I had recently learned about them. My Dad said, “Why don’t you try and find some information on the Ashton side of the family?” “Sure,” I replied. I immediately found Ashton Valve online. Most of the references were links to Ashton items that had sold on Ebay.

It wasn’t long before I had photographs of long deceased relatives that my Dad had never seen before. My

scrapbooks soon filled with hundreds of old advertisements and articles I had downloaded from turn of the century steam trade journals. The book shelves at my house started to fill with old gauges and other artifacts related to Ashton Valve purchased on Ebay. One of my friends who happens to be a steam enthusiast suggested I visit the annual “Steam Up” at the New England Wireless and Steam Museum in Rhode Island. I contacted the people running the museum and they loved my idea of having an Ashton Valve exhibit at the event. I honestly had my doubts that anyone would care about a largely forgotten company. I was wrong. Quite a few people asked me questions about the company and told their stories about working with steam. I had purchased a CD online of old Ashton Valve catalogs and the man who sold it to me surprised me by showing up at the show and giving me a safety valve from 1874, and a stock certificate dated 1877.

That day in Rhode Island was very inspirational to me. Not long after that, the same friend who told me about the “Steam Up” mentioned a museum he had visited some years back that had sponsored a steam show he thought was excellent and suggested I check out the



Henry G. Ashton invented a safety relief valve for steam engines in 1871 to make them safer after people died at an alarming rate due to boiler explosions.

museum sometime. It was the Charles River Museum of Industry and Innovation. A few emails and a couple visits later and here I am, talking about Ashton Valve and looking forward to the exhibit that will be here sometime this year.

I'll be informing you about a company that lasted over 100 years, a company that started with 4 employees and a vision to try and make boilers safer. At their peak they employed around 300 people and were known worldwide for their quality products used in locomotives, ships, and power houses. I would also like to think their products saved a few lives along the way, because boilers can be like bombs.

Ashton Valves was born out of Henry Ashton's desire to make boiler rooms a safer place to work. In the mid to late 1800's, people were dying at an alarming rate. In one year in the mid-1860's more than 1,000 people died due to boiler explosions and even more were injured. In April of 1865 the paddle steamer "Sultana," carrying Union prisoners back North from Confederate prison camps, exploded, resulting in the loss of 1500 lives. Another explosion in July of 1894 at a lumber mill

caused the death of four workers and did substantial damage to the mill. It was a horizontal tube type boiler and when the explosion occurred the pressure was probably about 500 psi. The boiler head was blown out and the rest of the shell left the boiler room and flew through the air for a distance of over 1200 feet. During its flight it passed through the mill and over several houses at a height of about 80 feet. The last 350 feet of its flight was through a dense and heavy woods where it cut off everything in its path, including a tree which was 28 inches in diameter. The insurance company stated "the safety valve did not work." It obviously wasn't an Ashton Valve!

In May of 1894 many people living in the town of West Bay City were terrified by the explosion of a boiler in the local planing mill. Buildings in the area were badly shaken up and the sidewalks of buildings nearby were littered with the glass from broken windows. The mill itself was wrecked and the boiler blown into four pieces. The engineer was blown against a sawing machine, cutting his lungs and heart out. Brick was thrown for a quarter of a mile. The late engineer was known to have a habit of running boilers with low water, claiming it was more efficient. In the years between 1885 and 1895, there were an average of 200 boiler explosions a year. Between 1895 and 1905, there were 3216 boiler explosions in the United States, an average of one a day, resulting in 7600 deaths and countless injuries. As recently as 2017, a man in Revere, Mass., died while tinkering with a faulty boiler. The explosion blew out the basement windows and a door clean off the hinges. There is an old quote, "Necessity is the Mother of Invention". The time was ripe for a major improvement.

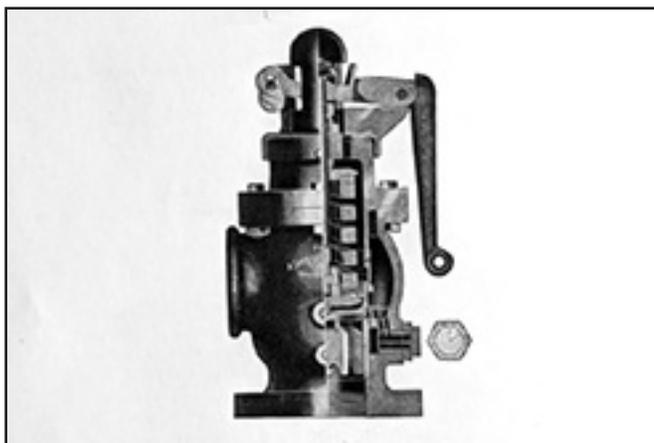


Pearl Street, Boston, after the great fire of 1872.

Time to introduce Henry Ashton. Henry was born in Norfolk, England, in 1846. His basic schooling was supplemented by a course in mechanical and steam engineering. He arrived in Boston in 1869 with his wife Emma and a 2-year-old son, Albert. He found work at the Hinckley Locomotive Works on Albany Street. He invented the lock up pop safety relief valve for steam engines in 1871 while working as the superintendent of refitting at the Eagle Sugar Refinery in Cambridge. He opened up shop at 138 Pearl Street with three other employees under the name Ashton's Lock Safety Valve Co. He was burned out by the Great Boston Fire of 1872. Sixty-seven acres of what is now known as the business district was destroyed with the loss of 767 buildings. Wooden buildings, high winds, and a shortage of horses to pull fire-fighting equipment all contributed to the destruction.

1873 finds the company at 9 Rowes Wharf by the waterfront. In 1874 they moved to 261 Purchase Street where they stayed for four years.

The Cathedral Fire in 1878 burned the company out from their location at 93 Federal Street. Finally, in 1879 they were able to attain some stability when the company moved to 271 Franklin St. They were at that location for 27 years. Another fire hit them in 1892, but the damage was minimal. The building was four floors to handle a business that had been growing rapidly since the introduction of the pop safety valve. In 1900, a fifth floor was added to keep up with the demand. They were always busy. In 1885, the Railway Purchasing Agent trade journal quoted the company as stating: "Ashton Valve has not discharged a man on account of any falling off in orders, nor run less than 10 hours a day during the last 4 years. The works are now running overtime in some departments."



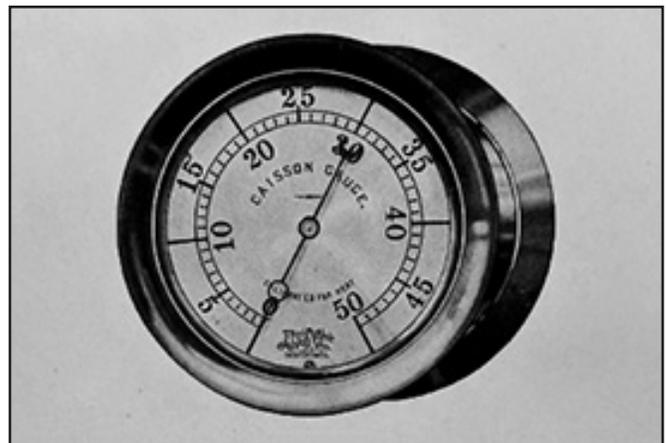
An Ashton pop safety valve.

1892 was an important year for the company as they purchased the plant, patents, materials, and business of the Boston Steam Gage Company. As their trade journal release stated: "The reputation gained by nearly 20 years' experience in the manufacture of safety valves and the widely recognized quality of the products of the Ashton Valve Company will be the only guarantee needed for the unsurpassed quality of the goods we shall put upon the market."

I find it surprising that it took them 21 years to get into the manufacture of gauges as they are the perfect complement to the other products they produced. And it wouldn't be long before Ashton Gauges were as well known to the industry as the safety valves. History has shown that the gauges are what Ashton Valve is best known for today, at least on Ebay, where they can sell for substantial amounts of money. There was one listed a couple of months ago for \$1700 dollars. They are works of art and quite popular with collectors and steam punk enthusiasts.

1895 was notable for the death of Henry Ashton, the company's founder. Most of his responsibilities would be taken over by his son Albert, who had attended MIT, and would be an important figure in the daily operations of the company for the next 27 years. In the years between 1895 and 1922 the company produced 440,828 pressure gauges, the peak years being between 1915 and 1920.

Trade shows, exhibitions, and conventions have always been an important part of any sales organization. They are essential opportunities to acquire new accounts, enjoy old customers, and check out the competition. These shows, as well as the many advertisements in trade journals, and the salesmen and distributors the



An Ashton pressure gauge.



The Ashton Valve Works, 271 Franklin Street, Boston, occupied by the company from 1879 to 1907.

company had all over the world, kept the profile of the company high. The reputation of an Ashton valve or gauge as a long-lasting top quality product was always heavily advertised. An ad in a 1921 trade journal read, "Ashton products, unequalled for quality, efficiency, and durability, higher in first cost but cheapest in the end". This was a time when you repaired things, you didn't throw them away. The company had a full service gauge repair service.

A few of the shows the company attended are worth mentioning for the awards they returned home with. At a Boston show in 1874 the Mass Charitable Mechanics Association awarded them a silver medal for their pop safety valves. The Mass Charitable Mechanics Association was founded in 1795 with Paul Revere as its first president. Its founding members first met to address the problem of runaway apprentices but soon evolved into a group committed to promoting the mechanical arts and raising money for members' widows and families. It still exists today. Is anyone here involved with this group?

Ashton Valves received a special premium award at the 1881 Cincinnati Industrial Exposition. In Chicago, they received another medal for pop safety valves at the 1893 World's Fair. They crossed the Atlantic Ocean in 1900 for the Paris Exposition, bringing home 1 silver and 2 bronze medals. In 1904, at the St. Louis World's Fair they received another silver medal for their display of safety valves and gauges.

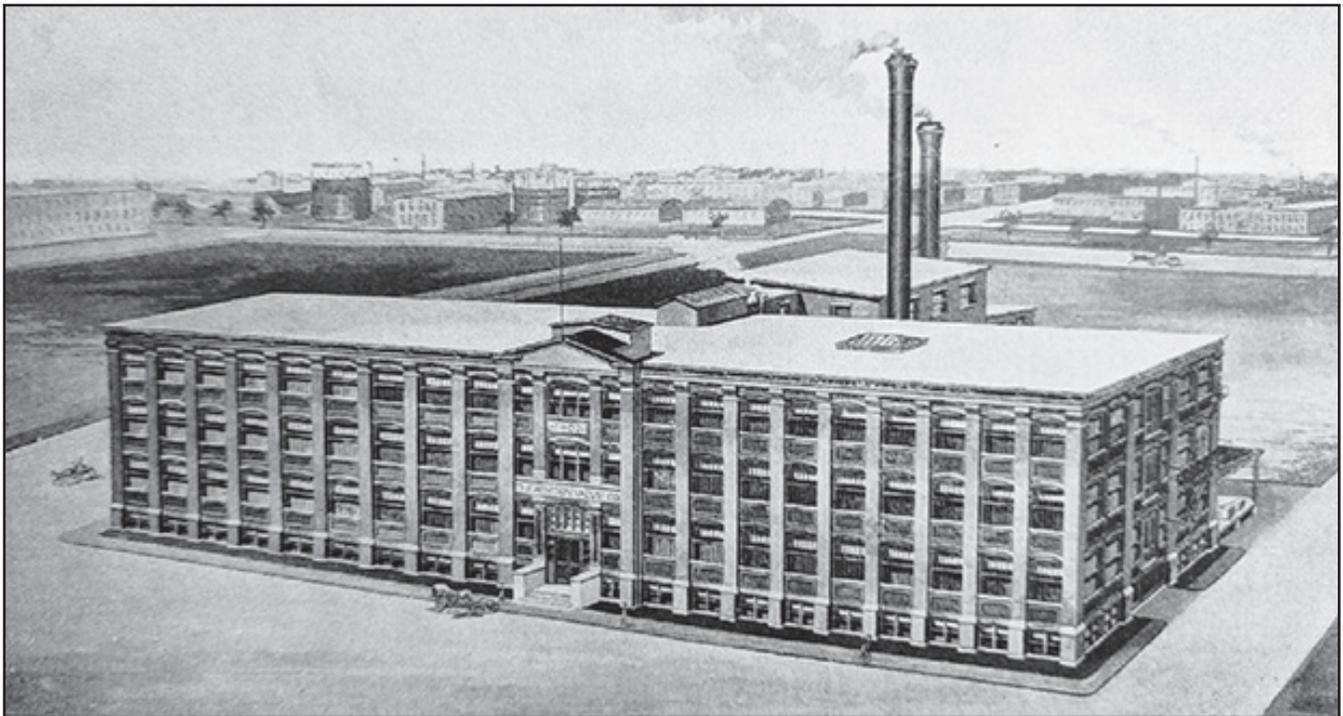
The late 1800's were times of active growth in labor unions nationwide. Both the American Federation

of Labor and the Boston Central Labor Union were gaining strength. After a walkout in 1895, Ashton Valve restored wages that had been reduced the previous year.

In May of 1901, 53 machinists walked out of the Ashton Valve Company as part of a nationwide strike for shorter hours with no reduction in pay. In June the local strikers committee accepted the Ashton Valve proposal of a 9 hour day with no cut in wages. The workers of the time were working 6 ten hour days per week. In 1912 the Boston Moulders Union #468 went on strike which resulted in a minimum wage of \$3.50 per day!

The Franklin St. building they had occupied for 27 years couldn't handle the business any more, and in 1907 they purchased land in Cambridge and built a 4-story 45,820 square-foot building. Located at 161 First St., the building still stands today with the Ashton Valve name clearly visible on the granite lintel above the front entrance. The Cambridge Historical Commission has some wonderful old newspaper articles on the building. It was built at a cost of \$67,000. It was one of the first modern factories built in what is now the Kendall Square area of Cambridge. Built on reclaimed swamp land, the facility featured modern bathrooms and electricity throughout the entire building. The four floors included a fireproof store room for paper drawings, iron shop, foundry, and a special testing room in the back with its own boiler, capable of creating steam up to 400 psi. It was obviously designed with the idea that a better environment would provide a more productive work force. In 1919, Albert Ashton introduced a course in modern production methods. The object of the course was to train men in the principles of foremanship, to develop their qualities of leadership, and to give them a broader view of industry as a whole. Mr. Ashton, the president of the company, who was the originator and organizer of this movement, thought that course would help develop the men who took it, as well as benefit the plant, through increased efficiency created by better cooperation. He was also of the opinion employee relations would be strengthened because of the more careful handling of problems by the trained foreman. This was quite a contrast to the Captain Bligh mentality used by many foremen and supervisors back then and even today.

The business was still growing. The 1920's and 1930's were the peak years of the company's influence. Their profit for the year 1916 was \$182,234 or a little over 4 million in 2018 dollars. The year 1919 showed a profit of \$214,178 or around 3.6 million in today's dollars.



A 4-story 45,820 square-foot building, located at 161 First Street, Cambridge, still stands today with the Ashton Valve name clearly visible on the granite lintel above the front entrance.

Both numbers are pre-tax dollars. By 1922 there were around 250 employees. Ashton Valve had satellite offices in New York City, Chicago, London, San Francisco, Mexico City, Philadelphia, St. Louis, Cleveland, Genoa, Vienna, and Paris.

The company helped form the Kendall Square Manufacturers Association and the Cambridge Industrial Association, which later became the Cambridge Chamber of Commerce. They were instrumental in starting a baseball and bowling league with other companies in the East Cambridge area.

1922 also saw the death of Albert Ashton, Henry's son. He had been managing the company since Henry's death in 1895. His brother Harry, who was the sales manager at the time, took over some of his administrative responsibilities. Business slowed in the 1940's. Diesel locomotives, gas-fueled automobiles, and electricity as the main source of power all contributed to the decline in sales. According to the 1957 book, "Atomic Power – Its Significance to the Management of a Relief Valve", "The Ashton Valve was a prime factor in the steam locomotive or railroad business, enjoying its best years in the late 1920's and early 1930's. Its contribution to the overall sales is one of diminishing proportions, another example to be anticipated when a company does not assume a responsible role in the

design development and manufacture of competitive products for an ever changing market." Unfortunately for Ashton Valve, the company never ventured far from the production of their steam-related products.

Ashton Valve merged with the Crosby Steam and Gage Company in 1948, sold the building to Nicholson & Co., an industrial adhesive manufacturer, and moved with Crosby into the old Winter Brothers Tap and Die building in Wrentham, MA. The Wrentham building was torn down in 2012. Crosby was purchased by Tyco and still operates out of a facility in Mansfield, MA.

Rick Ashton
(It was Rick's great-great-grandfather, Henry G. Ashton, who started the Ashton Valve Company.)



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