

# Society for Industrial Archeology · New England Chapters

2017

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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

### SNEC-SIA President's Report Spring 2017

On Saturday March 4, the 30th Annual New England Industrial Archeology Conference was held at Clark University in Worcester. The event included a total of eight presentations covering a wide variety of topics, including Saving Industrial Heritage: Overview and Ideas for the Future of Industrial Archeology by Sara Wermiel; The Rise and Fall of the Turnpikes in New England and the Air Route to Boston by Susan Koso; Preservation and Stabilization of The Lyons Turning Mill by Al Bina; The Sumner Tunnel: Innovation in Tunnel Construction under Boston Harbor, 1931-34 by Peter Stott; Making Places: Results of Connecticut's Historic Resource Inventory of Mills by Wes Haynes, and Renée Tribert; Providence's Industrial & Commercial Buildings District by Jason Martin; Classical Gas: Documenting and Interpreting Claremont, New Hampshire's 1859 Coal Illuminating Gas Plant by Matt Kierstead; and Textiles, Carriages and Local History - An Industrial Survey of Amesbury, Massachusetts by John Mayer. Thanks again to all the presenters for helping make the day a success!

On a more serious note, I have decided that this year will be my last as president of the Southern New England Chapter. It has been a difficult decision for me to make, but I will be relocating to another part of the country, and so, it will no longer be possible for me to attend events in New England. I plan to make myself available to help in the transition of chapter leadership, as necessary, including maintaining the shared website and e-mail distribution in the short term. I hope that my efforts during the past few years have been appreciated. Perhaps I'll see you at a future SIA event somewhere!

> Marc N. Belanger Taunton, Mass. mnbelanger@comcast.net

### NNEC-SIA President's Report Spring 2017

*Treasurer's Report:* As of March 15, we had 33 paid members' dues received. This was behind last year's receipts at that time. We need all members' dues received on time to be able to cover our costs! The bank balance as of 3/15 was only \$4,434 which was \$519 below this time last year. We need 50-60 members (paying their dues) to cover our costs of printing and mailing the newsletter and other costs. If you haven't already, pay up.

*Tours:* What would you like to explore? It doesn't have to be historic (although that's our focus); it could be a modern processing or manufacturing site. Let's also visit something in Maine or Vermont for a change. Call or e-mail your idea to David Dunning (603) 525-6939 dunmark@tds.net.

Production Machinery vs. Production Processing: The chapter has visited numerous historic Production Processing sites over the years. Some examples are: textiles, paper, lumber, and quarrying. Others not visited yet are shoes and the wide variety of mechanical products. Just as interesting, or even more, are the companies that designed and built the production machinery to manufacture those products. Some examples are (or were) Improved Machinery Company of Nashua (IMPCO) which made paper producing machinery and was later purchased by Ingersoll Rand Co., International Paper Box Machinery, International Shoe Machinery of Beverly, MA (called The Shoe), Crompton & Knowles (textile machinery), Scott & Williams (knitting machines) plus several companies that designed and made tannery equipment, wood processing machinery and quarrying machines. These New England companies had the Yankee Ingenuity for engineering new and better equipment. They didn't just supply the local market but sold their products nationally or even globally. Many of them, like IMPCO, were acquired by larger companies; Sullivan Machinery Company of Claremont (rock drills and air compressors) was bought by Joy Manufacturing. What dead or existing production machinery companies are near you that you would like to plan for a tour of? Contact the president or any other officer and tell us.

*Elections:* Next fall will be here soon. The people who get involved in running our chapter gain the most. If you joined SIA, it must be that you enjoy industrial archeology (history). Those who are active in planning and running what we do gain the most. Consider being a doer and not just an attender. Get on the board where the action is.

David Dunning NNEC President

### NNEC-SIA Fall Tour and Meeting October 27, 2016

Despite being held on a Thursday, the fall tour and meeting had the largest turnout in years with 34 members attending. The morning began with a tour of DD Bean and Sons, of Jaffrey, N.H., the largest manufacturer of paper matches in the world. The Jaffrey plant makes matchbooks with white covers that have 20 matches inside. They also have a Texas plant, which makes small order specialty matchbooks for conventions, weddings, advertising, business, etc.

DD Bean began making wooden matches in Jaffrey in 1923 but due to intense competition, sold out in 1928. Ten years later in 1938 he started making paper matches with his sons and today the company is still owned and managed by third generation members of the Bean family. The same former textile factory where they began is still being used, and have added another facility as the company expanded over the years.

The process of paper matchmaking begins with utilizing recycled paper treated with flame retardant chemicals. The flame retardant is necessary to keep the match from reigniting once it's blown out. The paper is then stamped out in strips of 120 individual matches and passes through a paraffin dip before being immersed into a match head composition. The match head composition, mixed in large vats, consists of potassium chloride, ground glass, dye and other agents. The striker surface is also mixed in vats; it consists of phosphorous, ground glass and polyvinyl acetate. A fire results when the match head potassium is struck against the phosphorous striker.

The match strips go down a carrier chain, which dips them into the red match head solution. They are then cut up into 20 matches, which are stitched into matchbooks, all by automation. Two machines make cartons from cardboard to hold 50 matchbooks per carton. The oldest of these machines dates back to the company's founding and is used in preference of the newer one. Once the matchbooks are placed in cartons, the cartons are wrapped in paper or, occasionally, shrink wrap.

Every work day three million paper matches are made by DD Bean and Sons during a 10-hour shift from Monday to Thursday. The largest threat to the production of paper matches are disposable butane lighters. They have captured 95% of the market, leaving DD Bean as the only producer of paper matches in the U.S. There is one wooden match maker left in the country which is the Diamond Match Company in Cloquet, Minnesota. We were surprised to learn that paper matches are used in only four countries in the world. They are the U.S., Canada, Egypt, and Guatemala. The rest of the world uses only wooden matches.

DD Bean still uses waterpower, not in mechanical produc-

tion but for electric power generation. We were shown the turbine, which currently is not working and needs repairs but can generate up to 20% of their electrical power. In an attempt to find new markets, DD Bean and Sons are trying out "firestarting kits" which they gave to us along with matches.

We next had lunch at the Peterborough Diner where the chapter held its annual meeting. No one volunteered or were nominated as officers, so current officers will remain in their positions for another year.

Our next stop was Monadnock Paper Mills in Bennington, N.H. Monadnock is the oldest paper mill in the U.S., first manufacturing paper in 1819 at its present location along the Contoocook River. At a time when most paper mills are closing, Monadnock has survived due to its ability to find and reach niche markets.

We were shown many of the products made by Monadnock paper, such as gift cards, wine and craft beer labels, posters, pamphlets, wood veneer backing papers, clothing tags, and dozens of other items from high quality paper. Using automated equipment and computers allow them to create small runs of different products.

Monadnock has been a pioneer in energy efficiency and green programs. They strive to reduce environmental impacts and use natural resources and recycle and reuse whenever possible. An example of this is short paper fiber waste being used as agricultural compost. By 2013 Monadnock's entire product portfolio is manufactured as carbon neutral using 100% renewable energy, which is so different from paper mills in the past. This is a family owned company, which may account for the flexibility in using new technology and adapting to environmental regulations rather than opposing them. Monadnock also generates up to 20% of their electricity from waterpower. Unfortunately, like DD Bean and Sons they were not producing any waterpower due to the summer drought conditions.

For those familiar with paper mills, the lack of employees on the factory floor while paper was being made was remarkable. Both tours show how automation is the way certain manufacturers have kept in business in industries with foreign competition. They also look for new markets and future trends. *We were not allowed to take any photos at Monadnock*.

Gerry DeMuro of Northern Heritage Mills provided information and assistance in arranging these tours and put us in contact with Henry Taves, a NNEC member who lives in Peterborough. After lunch, Henry showed us a few dams in town and gave a history of the local industries which depended on waterpower. It was remarkable that the small town of Peterborough once had so many dams and industries running off of them.

Dave Coughlin

# MAKING PLACES: Results of Connecticut's Historic Resource Inventory of Mills

The *Making Places* program of the Connecticut Trust for Historic Preservation has completed its documentation of the state's historic industrial resources under a survey and planning grant from the State Historic Preservation Office. More than 1,475 resources – from single buildings to sprawling complexes -- have been identified across 126 of Connecticut's 169 towns. The survey recommends 427 factories for



These factory buildings in Bridgeport, home to Grant Manufacturing and Machine Co., maker of riveters and fasteners, were built in 1906 and 1926, and illustrate the persistence of wood frame industrial buildings.

recognition on the State Register, complementing the nearly 280 already listed. The information gathered on surviving industrial fabric offers the opportunity for research and analysis on a variety of parameters. For example, construction date data identify more than 700 factories and additions built from the turn of the 20th century through World War I to the Great Depression, pointing to 25 years of sustained industrial expansion. A quarter of all surviving factories were used at some time for metal fabrication (hardware, tools, an enormous variety of parts for defense and consumer goods). The recent reuse of historic industrial sites as micro-breweries represents a resurgence of sorts, as at least four surviving complexes housed 19th-century brewery operations. As to construction, nearly 50 percent of surviving buildings are brick, but the first decade of the 20th century saw the short-lived application of rusticated cast stone, and the construction of wood frame factories continued well into the 20th century. The Trust will make available the information gathered on a website, Mills: Making Places of Connecticut, to go live later this year. In the meantime, please direct any inquiries or comments to Renée Tribert at 203-562-6312, or visit the Making Places page at the Connecticut Trust website, http://cttrust.org.

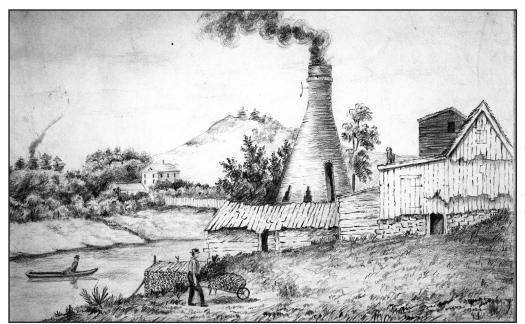


Figure 1. "Pottery at Norwich, circa 1820. Original Drawing in the Collection of the Slater Memorial Museum, Norwich.

# Ongoing Research: New London County Potteries and States Family Stoneware Tradition

Sometime in the 1820s or so, a young student artist from Norwich, Connecticut, drew a local pottery (Figure 1), likely one of the stoneware manufactories which then stood along the Yantic River above Norwich City in New London County. The roots of this industry lie in the last quarter of the 18th century when two kilns were in operation; over the next seven decades (1770-1840) production continued at these sites and others, and in Stonington and New London, a history explored in the 1940s by archeologist Lura Woodside Watkins, an account of which can be found in her classic Early New England Potters and Their Wares (1950:178-191). Several years ago, while studying stoneware assemblages excavated from Mashantucket Pequot sites (Handsman 2015), I began to trace over Watkins research in an effort to clarify the industry's history in southeastern Connecticut while exploring how future archeological studies could contribute significantly to this work. Consider this an initial progress report.

### Matters of Chronology

In 1800, there were four stoneware potteries in the county: two in Norwich along the Yantic and one each in East Stonington, near the Pawcatuck town line, and in New London along the Thames River. Table 1 summarizes their histories of production, based upon Watkins' research and more recent information compiled from primary documents unknown to her. By 1835, the industry had mostly disappeared from the county although the Risley Pottery Works of Norwich (Figure 2) persisted until 1881 after which the firm produced stonewares until 1895 as the Norwich Pottery Works.

Watkins recovered this rich history primarily through land and tax records and newspaper listings, while undertaking systematic field studies to identify each pottery's location. Today that history is equally well represented by whole vessels in the collections of the region's museums including the Slater Memorial Museum of Norwich (Armstrong and Wentworth, and Risley vessels), the Stonington Historical Society's Old Lighthouse Museum (the work of various potters from the States Family), the Leffingwell House Museum of Norwich (Armstrong and Wentworth, Sidney Risley), and the Denison Homestead of Mystic (Risley crocks and sherds from States family vessels). Also, the collection of the Connecticut Historical Society of Hartford includes outstanding examples of wares made in Norwich's Armstrong and Wentworth, and Risley potteries; and by Joshua Swan and Ichabod States of Stonington Borough.

Many of the extant, known vessels likely post-date 1800-1810 when manufacturers began to stamp their names on the sides of pots prior to firing. In the late 18th century, this feature presumably was not used, making the identification of early wares from the Norwich and East Stonington potteries more difficult. Archeological assemblages of locally-made stonewares, dating to the last quarter of the 18th century, can provide evidence of the visual and technological precedents of the later museum pieces. For example, excavations at Mashantucket Pequot site 72-161, a wetu-based occupation

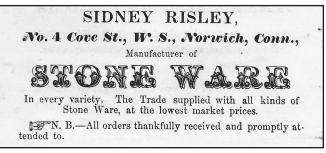


Figure 2. Advertisement for the Sidney Risley Stoneware Pottery. From the 1857 Norwich City Directory.

		New	London Co	ounty Sto	oneware l	Potteries,	1750-1850	)		
1750	1760	1770	1780	1790	1800	1810	1820	1830	1840	1850
Greenwich: Adam Sta	ites I ca 175		am Mead -1790							
Norwich:		Leffingwell 7. Williams P			Successors: 2. Potts (179		(1792-6) and	1		
			A. Tracy & Huntingtor		J. Hos	ssors: 1798 mer (1798-1 Cleveland (1	1802) and E	. Wentworth Elijah Sidney	& 1814-1834 Bill (1840-18 7 and George F -1881)	56), then
E. Stonington:		Adam States II (and Peter States to 1796) 1776-1803 or 1824								
Stonington Village:		Wm. States         J. Swan &           (& A. States II)         I. States           1806-1823         1823-1835								
New London:					Job Tabe Stephen Tr 1800-1803	ripp Wm.	Omensetter & States (AS I 00-ca 1828	·· 1		

circa 1780, produced sherds from five stoneware vessels (Figure 3) including a jug, two handled-pots, and two mugs, whose traits overlap identified wares from Norwich and elsewhere. Future comparisons of materials excavated from local potteries and house sites will help us identify and trace a complex of diagnostic traits for the county's stonewares.

#### **On the States Family Stoneware Complex**

Several generations of the States family of Stonington were involved in the development of the county's stoneware industry (Handsman 2016), all of whom were descended or related to the family patriarch, Adam States I (?-1769) who came to America with two brothers in the 1730s, later settling along Chessequake Creek in northern New Jersey where stoneware clays were abundant and where potteries were later built (Goldberg et. al. 2008). In the 1740s, Adam States lived and worked in New York City, where he produced stoneware jugs and spouted pots, decorated with remarkable slip trail designs, one of which sold at auction for \$31,000 this past March. By 1750 Adam I and his brother Peter States (1732-1802) had relocated to Greenwich, Connecticut, founding a stoneware pottery there which operated into the 1790s, using high quality clays mined from the Raritan formation in Huntington, Long Island. Little is known of the wares produced by the States brothers in Greenwich, but their successor Abraham Mead's work is well represented in museum collections including the Connecticut Historical Society in Hartford.

After Adam I's death in 1769, Peter States moved to Norwich, Connecticut, where he operated the Leffingwell and Williams' stoneware pottery for several years; his nephew Adam States II (1756-1826) served as his apprentice. By the mid 1770s, they both had moved to East Stonington, near the Westerly, Rhode Island line, where they built a stoneware pottery, operated by Adam II until 1803, and perhaps by other family members until the early 1820s. Meanwhile William States (1778-1823), son of Peter and cousin of Adam II, was operating a second stoneware pottery in Stonington Borough. Opened in 1806 this pottery continued production after Williams' death in 1823 as the Joshua Swan and Ichabod States firm until 1835. Today the sixty-year serial history of the States family stoneware complex is well represented by vessels in the collection of the Old Lighthouse Museum of the Stonington Historical Society (Figure 4). Lura Watkins visited these States family potteries in the mid 1940s, assessing their condition and making small collec-



Figure 3. Stoneware Vessel Fragments from Mashantucket Site 72-161. Represented are a jug and three pots with handles whose attachments are painted with cobalt blue slip.

History, Smithsonian Institution. William States' pottery, in Stonington Borough at the foot of Wall Street adjacent to Little Narragansett Bay (Figure 5), was easily found as dense accumulations of failed pots and kiln furniture littered the surface, sometimes scoured and buried by historic floods. In East Stonington, Watkins was unable to identify the actual kiln site, thinking it had been buried during the construction of a retaining wall sometime in the early 1900s. Aboveground field studies in the fall of 2016, undertaken by the author, suggest that site is intact, partially dismantled and then buried within the footprint of an historic barn west of the farmhouse once occupied by Adam States II and his family. Pieces of the kiln floor, walls, and arches were identified around this barn's foundations.

Future excavations at the Adam States II pottery will clarify the technological histories and production processes of the family's stoneware complex and allow us to explore how their work was affected as the industry expanded and became more competitive across southern New England in the 19th century. Studies of museum and archeological collections are also continuing in an effort to understand the geography of the States stoneware complex and its role in the coasting trade around Long Island Sound (and beyond) between the 1770s and the late 1830s.



Figure 4. States Family Stoneware from the Old Lighthouse Museum, Stonington Historical Society. Includes a jug by Adam State II, a pot by William States, and a pitcher by Joshua Swan and Ichabod States.



Figure 5. 1827 Map of Stonington Borough with the States Family Stoneware Potter. First operated by William States (1806-1823) and then by Joshua Swan and Ichabod States (1823-1835), the kiln is located on the shoreline of Little Narragansett Bay. A workshop is shown further to the west. The States family wharf, used in the coasting trade, extends into the bay. From the "Map of the Harbour and Borough of Stonington, County of New London." Surveyed and drawn by Lieutenant J. Prescott, Engineering Department, United States Topographic Bureau.

NOTE: Russ Handsman would appreciate hearing from archeologists and others who have identified States stoneware in their collections. He can be reached at rhandsman@att.net.

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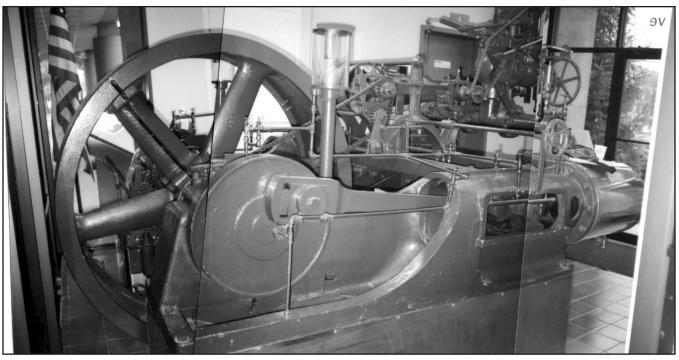
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Russ Handsman rhandsman@att.net

# A 1923 ten ton Brownell two-cylinder steam engine, an historic American paper mill technology legacy, saved from the wrecking ball by Northern Heritage Mills, SIA members, engineers and educators



Restored 1923 two-cylinder Brownell 9-ton steam engine in the entrance lobby of the Newark Paper Mills Group International office complex in New Jersey just before transporting it to Northern Heritage Mills in New Hampshire.

The Newark Group, of Newark, New Jersey, paper mills originated in 1666 with the settlement of Puritans who were skilled carpenters, sawyers, potters and millers, including the Dodd family that left Connecticut since it was becoming too liberal for their beliefs and settled in Bloomfield, NJ, close to the Passaic River. The New Jersey governor offered attractive terms for available land with a promise of entire religious liberty. In 1815 a water powered paper mill was built on the Third River by the Dodd family. During the year 1842 the Davey family of Bloomfield built a paper box board (heavy cardboard) mill using hemp, ship's ropes, pulp, yarn, linen and the tidal marsh phragmite (*Spartina Alternaflora*) reeds in place of wood from trees. The reed descendants remain growing today along the New Jersey Turnpike near the Newark International Airport.

The Dodd family married into the Davey family and continued in the paper mill business which led to the success of the paper mill to amass good fortune being the supplier of the covers for hard covered books which were called paperboard. The principal bookmakers were in the New York City area and were a reliable market for the paperboard or 'binder's board'. (Bookbinders identify book covers as binder boards.) The demand for paper and paper board substantially increased in the New York City area during the 1890's, and other reliable markets for the paperboard were the steamer trunk manufactures in the region.

Newark Boxboard began in 1912, and by 1923 the company built a new mill which was powered by a new Brownell two-cylinder steam engine designed to supply the needed energy for the mill machinery. With excellent management and skilled paper making craftsmen, they became a successful maker of paper board using only recycled waste paper from nearby New York City.

The Brownell steam engine ran for the next sixty years for its three working shifts and was removed from service in 1985 due to the fact that new workers did not know how to run the engine. By 1985 the Newark Group had a successful career and did purchase other paper board mills in New Jersey, New England and overseas. Collectively the Newark Group owned twenty large paper board mills which employed thousands of employees.

The owner/CEO, Mr. Edward Mullens, admired and appreciated the extensive work of the historic Brownell steam engine and instead of scraping the metal steam engine determined to have the complete engine, including the whistle and the rare leather cone governor, restored and had the engine installed in the entrance lobby of the Newark Group's new International Executive HQ Complex near its original site of Newark.

The preserved Brownell steam engine is a symbol which represents important American historic manufacturing engineering technology which produced paperboard used for hard covered books, heavy cardboard for steamer trunks, card board for industry and allowed the Newark Group of mills to establish themselves as an international success employing thousands of workers and using hundreds of thousands of tons of only recycled paper each week within the twenty mills around the world.

The success and growth of the Newark Group was attributed to the vision, interest and technical problem solving skills combined with the expertise of management engineering prowess. The management engineers and their constant vigilance to create and improve their manufacturing technologies hired small machine shops to create new manufacturing solutions which resulted in product and outcomes in a constant flow of small patents to protect their manufacturing improvements.

The pool of talented management engineers and associations of the Newark Group utilized and developed new technologies which enlisted major contracts that maintained the paperboard industry's future. Several examples are the Parker Brothers and Milton Bradley board games which hinged one way only; Hava Tampa cigar boxes; Lorillard Company cigarette manufacturing to put premium brand cigarettes into crush proof boxes; *Dr. Seuss* books; *How To* books as well as trade books, puzzles and paper towel cores. Before 1960 there was little readership interest in current events, yet books were beginning to be sold in grocery stores. Following the assassination of President Kennedy in 1963, current news and events with *How To* books became standard sales items as seen in the Newark Group production of millions of covers for *The Torch is Passed*.

#### 1950's example of manufacturing Boxboard, Paperboard or Binder's board from a Newark Group management engineer interviewed in 1990.

As Mr. Mullens described, ".... after the paper machine made the new pressed paper, it went on to a large couchroll accumulator cylinder which could make any number of needed ply's necessary for the required thickness. A sharpened blade would then fly out of the cylinder to cut the wet and heavy lap so it would fly off the accumulator roll while the cylinder was traveling several hundred feet per minute. The wet mat of 100x90 inches would then fly out to a table where a worker, on either side, would grab the tick wet paper mat before it hit the table and be piled in three to four layers together, be sawed to length where the workers would pick up the sizes and transfer them onto a skid to drain. The pile would be placed under a hydraulic press to compress the mass to one-half its thickness. The individual pieces would be hung on racks on castor trucks which would be pushed into the hundred-foot-long heating tunnels to dry for several hours.

The heated sheets would exit dry and disfigured which needed moistening to then pass through two sets of extremely heavy steel mill type rollers to acquire its required density and smoothness. The final step was to saw the ragged edges for even squares before shipping to the customers...."

The winds of change brought less than a robust economy and the new management decided to sell the company in 2014 to Caraustar Mill Group located in Georgia who planned to relocate all the offices and management team from the Garden State to the Peach State. Caraustar did not want the Brownell engine which became a legacy and symbol of the Newark Group.

A Newark Group executive management engineer, Barry Jensen, from New Hampshire, knew of the interest and ability that Northern Heritage Mills had in preserving historic old mill technology for a working educational engineering program and contacted NHM's president, Gerry DeMuro. After extensive calls to the new executive secretary, Ms. Viki Naranjo, who was entrusted to close down the corporate office, provided valuable assistance. Northern Heritage Mills' DeMuro found a proactive and kindred spirit who could appreciate the preservation of the Brownell for future generations even as the company had contacted a scrap metal dealer who was determining how to break it down to be hauled away and be melted in China. Heritage Mills lobbied and was successful in having the engine donated to their educational organization. The company agreed to the stipulation that it had to be removed by a professional machinery mover within sixty days, at which time DeMuro assembled a team of professional engineers, educators and preservationists and working with Ms. Naranjo came together to develop a viable and successful plan to move the engine out of the headquarters' lobby and transport it New Hampshire.

Last minute historic funding is always a significant challenge equal to locating like-minded individuals who will actively complete the process. Heritage Mills did locate this much-needed collaborative team of strong preservation associates who realized the value of and believed in engineered historic mill technologies which connects historic American precision manufacturing to its industrial legacy.

There were several five hundred mile trips from New Hampshire to New Jersey to organize the donation of Jersey components and to preserve extensive and rare archival paper mill histories, limited edition mill books, product samples, records, blueprints, photographs and again with cooperation and assistance of Ms. Naranjo.

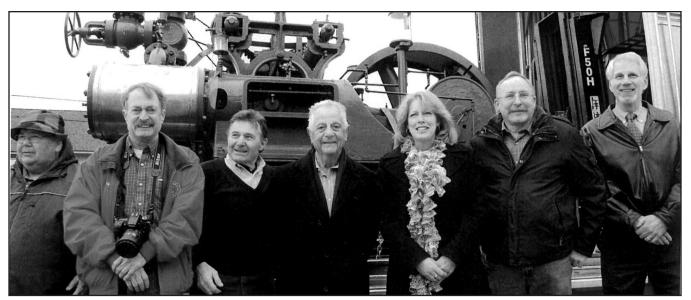
DeMuro was able to secure funding from Maine to California and Georgia in which Heritage Mills is deeply grateful and wishes to acknowledge and thank the following SIA members, engineers, educators and industries: Wes Brubacher; Chip Taylor; Carl B. Bieienberg; Greg Young; Dr. Lenard Weldon, Dr. Mark Wellens; Henry Taves; Ron DeMuro; NH State Representative Larry Converse; Jay Shanks; Ray Breslin, Home Depot; Hamshaw Lumber; Bill Binder; Phillip DeMuro; as well as to COTE Riggers of Goffstown, NH, who donated much extra time.

Northern Heritage Mills seeks to preserve rare historic technologies and educational tools. These technologies will be used in our Living Industrial History Engineering Educational Demonstration Center. For more information contact nheritagemills@yahoo.com.

DeMuro concludes with SIA members that "it is our responsibility to preserve what remains of historic American mill technologies and realize we can initiate our ideas and actions in real time than to possibly wait for state and national organizations. Northern Heritage Mills appreciates all for your active support and we at Northern Heritage Mills will continue to pursue the legacy and preservation of American technology."

The short paper mill history points out the impact of a strict family group of well-established Puritans who left Connecticut and ventured to Newark, New Jersey, in 1666 and changed the rural landscape with their entrepreneurial and engineering skills. The outcome of their impact which began the paper making industry by using manual labor with a small water powered mill was destined to be an international success story. The steam engine represents that engineering paper mill legacy.

> Gerry DeMuro, Board Chair Northern Heritage Mills (603) 835-2386



Reception at the Sugar River Valley Technical Center, Claremont, NH, where the preserved engine will be demonstrated by Heritage Mills, a non-profit educational organization, as an engineering educational tool. From right to left: Joel Schneid, Director of the Technical Center and Heritage Mills board member, Scott Pope, Engineering professor, Claremont City Mayor Charlene Lovett, Guy Suntagate, City Manager, Gerry DeMuro, Heritage Mills President. Chip Taylor, engineer, Russ Hobby, Steam Engineer. Photo: Bill Bender.

## Membership Applications to the Northern and Southern New England Chapters of the Society for Industrial Archeology

The Society for Industrial Archeology promotes the identification, interpretation, preservation, and modern utilization of historic industrial and engineering sites, structures and equipment.

### Northern New England Chapter (ME, NH, VT)

Membership and Dues for 2017

Member Renewal: \$20.00 Student: \$10.00 New Member: \$15.00

Send to: Rick Coughlin, Treasurer – NNEC-SIA, 1 May Street, Rochester, NH 03867

Name:	Occupation:
Address:	
Phone:	Email:

### Southern New England Chapter (MA, RI, CT)

Membership and Dues for 2017

Regular: \$10.00
Student: \$8.00
Lifetime: \$150.00
New member: \$8.00

Two members at one address pay only one membership fee. As we are communicating increasingly by email, it is vital that we have your current EMAIL address.

SNEC-SIA is your best opportunity to gain a close-up on-site look at extraordinary technologies and exciting engineering history. Join us for another year of newsletters, tours and more.

Complete and return this with your check made payable to SNEC-SIA.

Send to: Sara Wermiel, Treasurer – SNEC-SIA, 70A South St, Jamaica Plain, MA 02130-3143

Name(s):	_Occupation:
Address:	

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Are you a member of the national Society for Industrial Archeology? [ ] Yes [ ] No

Delivery Preferences (please check one):

[] Traditional Delivery (paper version of newsletters and tour / event notices via U.S. mail)

[ ] Partial Traditional Delivery (hard copies of newsletters and e-mail notices of tours / events)

[] Paperless Delivery (PDF copies of newsletters via e-mail link)