The SS United States is the largest passenger ship ever built in America. She is 990 ft. long (5 city blocks), has 12 decks, and carried a crew of 1,000 and almost 2,000 passengers. To this day, she holds the Blue Riband for the fastest transatlantic crossing, achieved on her maiden voyage in 1952. Going over 36 knots (44 mph), the ocean waters blasted the paint off her bow as she took the speed record from the Queen Mary. The SS United States, with her raked red, white, and blue smoke stacks and affectionately known as the “Big U,” was the sea-going symbol of post-war America. Totally American-made, she was the symbol of American ingenuity, innovation, and confidence during the 1950s and 1960s.

During World War II, the federal government found that its military was lacking large ships to transport soldiers to the European battlefront. This void was filled by the British transatlantic ocean liners RMS Queen Elizabeth and Queen Mary, which transported hundreds of thousands of American soldiers through the sub-infested north Atlantic. Facing this transportation shortcoming, the military secretly began laying the groundwork for a super-ship. After the war, the U.S. Navy partnered with United States Lines to build a ship that first would be a troop ship and secondly a transatlantic ocean liner. Built to exacting Navy specifications, her $79 million cost was underwritten with $50 million from the federal government.

Designed by William Francis Gibbs of Gibbs & Cox, the SS United States was built during the Cold War with the capability to convert to a troop carrier within several days’ notice. With a beam of 101 ft. and draft of 31.25 ft., she was

The SS United States on her sea trials, June 10, 1952. Here she reached her highest recorded speed ever, 38.32 knots (44.1 mph). This is the greatest speed ever achieved by an ocean liner.
able to pass through the Panama Canal with 2 ft. of clearance on either side. She had the potential to carry an entire army division of 14,000 soldiers over 10,000 miles without stopping for fuel, water, or provisions. Built at the Newport News (Va.) Shipbuilding & Dry Dock Co., her keel was laid on Feb. 8, 1950, and her hull constructed in a graving dock. Launched June 23, 1951, she was America’s “ship of state,” an icon on both sides of the Atlantic. Many sought for years to learn her top-secret design features.

More aluminum was used in her superstructure than in any other construction project of her day. The weight savings helped her achieve unprecedented speed. A special insulating barrier had to be used wherever the aluminum met the steel joints of the decks and hull to avoid galvanic corrosion. She was designed according to the unit machinery arrangement with two separate steam plants with independent sets of boilers and turbines in watertight compartments. This design ensured that if one power train was damaged in a military encounter, the other could continue to propel the ship. Gibbs & Cox was a pioneer in incorporating this design into U.S. Navy destroyers in 1937. She boasted five waterproof compartments to prevent sinking even if her hull was damaged heavily.

The SS United States was a quadruple-screw vessel powered by four Westinghouse steam turbines that produced up to a combined 247,785 shaft hp. Power was delivered to two, four-blade and two, five-blade, 18-ft.-diameter, manganese-bronze propellers. It should be noted that today’s nuclear-powered aircraft carriers produce only slightly more power than this. Reaching up to 1,200°F, four oil-burning boilers could make her turbines spin faster than those of other ships of her day. She could go over 22 knots in reverse, which is faster than most ships can go forward. In sea trials, Big U went forward at 45 knots, with some power still held in reserve.

Gibbs went on to incorporate many technical features of the SS United States into the construction of the U.S. Navy fleet. The ship was the prototype for the first super aircraft carriers of the Forrestal class. With many aspects of the propulsion system considered top secret, it was not until the late 1970s that information on her workings was de-classified by the government.

Gibbs was a fanatic about fire safety and was credited with constructing the safest of ships. To minimize the risk of fire, no wood was used in Big U’s framing, decorations, or exterior or interior surfaces. All items, such as bedspreads, curtains, and furniture, were made in metal, glass, or spun-glass fiber to ensure compliance with naval fireproofing guidelines. All commissioned artwork also had to follow these guidelines. The only two items of wood permitted onboard were the galley’s butcher’s block and the ballroom’s Steinway grand piano. Gibbs had requested a piano out of aluminum, but Steinway refused. Gibbs relented after a demonstration of the piano’s dense, fire-resistant wood, which failed to ignite even when doused in gasoline.

The market for travel by ocean liner dwindled in the 1960s with the advent of transatlantic jet-airplane travel. The SS

In June 2014, cruise industry executive Jim Pollin donated $120,000 to save this once-top-secret, 60,000-lb., five-blade, 18-ft.-diameter propeller from being scrapped. His only stipulation? That it remain aboard the SS United States.
The SIA’s next annual conference will be headquartered in Albany, N.Y., May 28-31, 2015 (the weekend following Memorial Day). [NB—earlier announcements indicated this year’s conference would be held in Schenectady later in June but local hotels were unable to fulfill our requirements.]

Located at the head of tidal navigation on the Hudson River, at the confluence of the Erie and Champlain canals, and on the main lines of the New York Central, Delaware & Hudson, and Boston & Albany railroads, the area around Albany, Troy, and Schenectady has a rich history of manufacturing and transportation infrastructure. Conference organizers are arranging an array of tours and events throughout the Hudson-Mohawk region. SIA last visited the area in 1973 (2nd Annual Conference, Troy) and 1987 (16th Annual Conference, Troy). It has been over 25 years since we held an event in this region and the manufacturing landscape has changed with traditional foundries, machine shops, paper and textile mills, and garment factories supplemented (and in some cases supplanted) by producers of robotic equipment, cryogenic power transmission systems, fuel cells, and electrical equipment.

In addition to process tours at sites not previously visited by the SIA, we will have behind-the-scenes tours of operations of the New York State Canal System (recently listed as the longest National Register district in New York State), including a boat ride through five locks of the Erie Canal’s Waterford flight (completed in 1915, recently designated a National Civil Engineering Landmark) and a visit to the 1921 Waterford Canal Shops where timber and steel lock gates and valves are fabricated and the dry dock where tugs and dredges repaired. We’ll also tour Cohoes Falls and the nearby Harmony Mills (NHL), as well as the Mechanicville Hydroelectric Plant, built in 1897 and the oldest continuously operating hydroelectric plant in the U.S. with original equipment. Of course, we’ll also make a pilgrimage to Troy’s gasholder house, the inspiration for the SIA’s logo. Watch future issues of SIAN and the SIA website (www.sia-web.org) for conference updates. Registration materials will be sent to all members in late winter.

The Albany Hilton will be our headquarters. Located at 40 Lodge St. on the corner of State it is two blocks from the state capitol with restaurants and interesting architecture within easy and safe walking distance. The hotel offers a free shuttle from the Albany Airport and the Albany-Rensselaer Amtrak station on the other side of the Hudson. The hotel is offering a conference room rate of $142/night (plus tax) and $5/day parking. To make a reservation, contact the hotel directly at 1-800-445-8667, 518-462-6611, or www.hiltonalbany.com and indicate a group code of 4SFIA.

Call for Papers

The SIA invites proposals for presentations and poster displays at the 44th Annual Conference on Sat., May 30, 2015. Poster displays can be works in progress. Presentations on all topics related to industrial archeology, technology, social change related to industry, and historic industrial structures are welcome. Papers about regional industries and transportation in New York’s Hudson-Mohawk region are particularly encouraged. Presenters on historic bridge-related topics are encouraged to participate in the 24th Historic Bridge Symposium, which is planned to be one of the parallel presentation tracks. All presentations and poster displays should offer interpretation and synthesis of data.

Presentation Formats: Proposals may be for individual presentations (20-min.), a group of three or four presentations on a common theme filling a 90-min. session, or a 90-min. panel discussion (formal moderator optional). SIA will

(continued on page 7)
United States became unprofitable and was suddenly retired from service in 1969 while at Newport News for an annual overhaul. She was bought by a series of companies in the following years with never-realized plans to continue her service as an ocean liner. In 1992, Marmara Marine Inc. purchased the ship and had her towed to Turkey and then Ukraine, where she underwent asbestos removal. The interior of the ship was almost completely gutted. Plans to bring her back into service once again failed, and she was towed back to the United States and moored at her current location in Philadelphia. In 2003, Norwegian Cruise Lines (NCL) purchased her with plans to have her cruise the Hawaiian Islands. However, these plans were slow to materialize; the financial crisis of 2008 and a change in company hierarchy put an end to NCL’s plan, and Big U was once again put up for sale in 2009.

Rather than sell her for scrap, NCL took a loss and sold the ship to the SS United States Conservancy in 2011. This was achieved in part due to a generous $5.8 million grant from H.F. “Gerry” Lenfest of Philadelphia. In addition, funds and donations from hundreds of supporters facilitated the ship’s continued maintenance and preservation. The monthly insurance, mooring and security fees are quite formidable—about $60,000 per month. This summer, Conservancy supporter Jim Pollin made an extraordinarily generous donation of $120,000 to “purchase” one of the 61,000-pound propellers, with the stipulation that it remain on the ship. In addition, Jim pledged to match up to $100,000 of all donations made during this critical time of trying to save the ship. The plight of the ship has been featured in major media outlets, most recently in the New York Times and The Washington Post.

This influx of money has resulted in the SS United States Redevelopment Project advancing plans to secure a permanent location for the ship as a mixed-use waterfront destination, such as was done with the SS Rotterdam, which has been docked since 2008 as a combination museum, hotel and vocational school in Rotterdam, Netherlands. In addition to offering potential office space, hospitality options, and education and research facilities, the redevelopment team’s vision includes recreating some of the ship’s iconic public rooms; permanent exhibitions showcasing the ship’s most famous passengers (such as da Vinci’s Mona Lisa); a theater complex/event space; and a shipboard museum featuring the science and technology behind the world’s fastest ocean liner. The SS United States Center for Design and Discovery would showcase examples of mid-20th-century American innovation, culture, and society, and visitors would be able to tour one of the ship’s record-breaking engine rooms and view the once-top-secret power plant. Plans for incorporating a green-generation power unit in her hull to power the ship and possibly surrounding neighborhoods are also being reviewed.

Renowned author and illustrator David Macaulay is presently working on a new book that explores the importance of the SS United States within a broader history of technology and innovation. He has been sharing sketches and reflections in “David Macaulay’s Journey Aboard Superliner SS United States,” his blog on the Conservancy’s website. The book has a working title of Ingenuity: A Journey and is scheduled for publication in 2015.

In the event that sufficient funds are not raised to maintain the ship until a development agreement is reached, this American icon could be cut up for scrap. The Conservancy is striving to avoid this looming tragedy with an 11th-hour call-to-action. In addition to fund raising, the Conservancy actively seeks new members to get involved and help spread the word. Former Big U passengers and crew are especially encouraged to join the effort to help save “America’s Flagship.” As Walter Cronkite, a former Honorary Chair of the Conservancy’s Advisory Council, said: “It would be a crime against history to permit this great vessel to be forgotten or destroyed.”

To learn more about the plight of the SS United States visit: www.ssusc.org, www.facebook.com/ssusc, www.twitter.com/ssusc, and www.savetheunitedstates.org. You may also contact the Conservancy’s New Jersey Chapter chairperson, Chuck Parodi, at (201) 843-6966 or EMT5748@aol.com.

Chuck Parodi
Attention SIA Members!

Now is your chance to nominate candidates to represent your society and keep SIA moving forward. This is your opportunity to help maintain the quality, strength, and diversity of leadership that has kept the SIA growing for more than three decades.

SIA’s leaders are expected to consider and reflect members’ interests in carrying out the business of the SIA. They represent the SIA to other organizations, recruit new members, and plan the future of the society.

In 2015, there will be four openings: two on the Board of Directors, one on the Nominations Committee, and one representative to TICCIH. We need candidates willing to give back to the SIA by volunteering their time, knowledge, and experience. The Nominations Committee is depending on you to identify members—friends, colleagues, or perhaps even yourself—who are qualified and willing to serve. (If modesty precludes self-nomination, please find someone to nominate you.) Each candidate must be an SIA member in good standing and must consent to being considered for nomination.

The deadline for nominations is **Feb. 3, 2015**. If you have any questions or need additional information, please don’t hesitate to contact **Susan Appel**, Chair, SIA Nominations Committee, 307 North Garfield Ave., Champaign, IL 61821, 217-351-9059, s.appel@att.net.

**Positions Open in 2015:**

**Directors** (3-year term). Two of seven director positions on the Board of Directors are open this year. The Board meets approximately four times per year (both in person and online), including during the Annual Conference. Directors govern official business of the SIA and chair committees that oversee operations such as publications, grants, and local chapters.

**Nominations Committee Member** (3-year term). One of three elected members who assist with recruiting and evaluating nominees and monitoring annual elections. It is expected that the newly elected member will chair the committee during the final year of the term and attend the Annual Conference to count votes and announce the results of elections.

**TICCIH Representative** (3-year term). U.S. representative to the International Committee for the Conservation of the Industrial Heritage (TICCIH). The representative is tasked with increasing U.S. and SIA involvement with TICCIH. The representative is expected to fund his/her own travel expenses or be backed by an institution/company to cover the estimated $2,000/yr. for the annual TICCIH meeting.

All nominations will be reviewed by the Nominations Committee, which will present a slate of candidates to the membership. Each nomination must include the name, address, telephone number, and e-mail address of the person being nominated, the office for which the nomination is being made, and evidence that the candidate consents to being nominated. Once the slate is selected, the Nominations Committee will request a brief biographical statement and a photograph from each nominee.

For summaries of the nomination process and responsibilities of SIA officials, view the SIA bylaws on the About screen at [http://www.sia-web.org/](http://www.sia-web.org/). If you’re unsure about the process or the obligation, please call or write Susan Appel at the address above.

**SIA Officers**

- Amanda Gronhovd, President (2014-2016)
- Maryellen Russo, Vice President (2014-2016)
- Duncan Hay, Past President (2014-2016)
- Justin Spivey, Secretary (2013-2016)
- Nanci K. Batchelor, Treasurer (2013-2016)

**Board of Directors**

- Gianfranco Archimede (2012-2015)
- Erin Timms (2012-2015)
- Ann Dichter (2013-2016)
- Saul Tannenbaum (2014-2017)

**Nominations Committee**

- Susan Appel, Chair (2012-2015)
- Lynn Rakos (2013-2016)
- Duncan Hay, ex officio (2014-2016)

**TICCIH Representative**

- Peter Stott (2009-2015)

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**SIA Industrial Heritage Grants Applications Due March 1**

The SIA’s Industrial Heritage Preservation Grants (IHPG) are made to nonprofit organizations and qualified individuals for the study, documentation, recordation, or preservation of significant historic industrial sites, structures, and objects. Grants in the amount of $1,000 to $3,000 are awarded once a year and announced at the SIA Annual Business Meeting. Applications are due each year by March 1. To learn more about IHPG and the application process, contact Maryellen Russo, Grants Committee Chair, mrusso@blantonassociates.com or www.sia-web.org/grants/about.html.
In April 2014, the Fire Museum of Maryland (tour site—1995 Annual Conference, Baltimore) introduced a new permanent exhibit demonstrating the progression of fire-alarm communication technologies. Covering the period 1852 to the present, the exhibit allows visitors to see, hear, and interact with the technological changes that have occurred in fire communications over the course of more than 150 years. The new exhibit is more than twice the size of the previous one, and incorporates many working telegraph registers, manual and automatic repeaters, and central office-specific technology, in addition to period furniture and lighting.

Curated by Director Stephen G. Heaver, Jr. [SIA], the exhibit has been planned for more than a decade. There are currently 16 alarm boxes within the exhibit, six of which are operational and can be pulled by visitors to demonstrate how an alarm was transmitted from the street to the central-alarm office. Staff also demonstrates how the alarm was then retransmitted from the central office to the individual fire stations. There are additional boxes on the main exhibit floor that visitors can actuate as well.

Divided into four distinct periods, the exhibit follows the progression of telegraph technology from the initial use of Samuel F. B. Morse’s 1844 invention through to the modern use of radio and satellite communications. Morse’s work with telegraph systems was adapted to the fire service by 1852, when the Boston Fire Department began placing alarm boxes on the city’s streets. Shortly thereafter, Morse’s alphabet was replaced by a numerical system designed by various fire departments, which is still in use today throughout the U.S. The numerical system was deemed to be easier to “read” than Morse’s code, requiring significantly less training.

The oldest piece on display is an 1859 marble transmitter that was used in the Baltimore central office from 1859 to 1988. As with many technologies, innovation and improvements in machining precision during the second half of the 19th century allowed manufacturers to develop machines with greater capacity. Many of the early telegraph registers were designed by clock and watch makers, including Moses G. Crane and James M. Gardiner. Even the prolific inventor Thomas A. Edison contributed to the progression of fire-alarm signaling technology. These men of precision used their technical knowledge to create the mechanical movements necessary to accurately record alarm signals and improve the safety of citizens and their personal property.

The next significant change is demonstrated by a wooden watch desk containing a working 1920s-era telephone and a single-circuit punching register. A 3-dial transmitter, used by the Baltimore City Fire Department from 1922 until 1962, allowed up to three separate alarms to be transmitted from the central-alarm office to the surrounding fire stations. The transmitter was used more than 200,000 times during its service life. This period also includes multiple-circuit registers, demonstrating the variety of offerings available to fire departments. On the basis of the size of the cities served, departments could order from one- to six-circuit registers. These registers could also be combined with time stamps, which would imprint the time at which an alarm was transmitted. Nearly all of these machines, regardless of function or location, operated on 100 milliamps. This standardization allowed machines produced by different manufacturers to be commingled, while limiting the draw on the electrical grid.

Further advancements included a change from round punching registers, which left a smooth circular hole in the paper tape, to triangular piercing registers. The triangular pierce allowed the alarm or watch desk officer to better track alarms as they came in, limiting confusion and error. The piercing motion served to eliminate the waste paper rounds that accumulated with punching registers, which meant that alarm officers could better focus on their main duties of receiving, recording, and transmitting alarms.

The Fire Museum of Maryland opened new exhibit on fire-alarm communication technology in April 2014.

Some of the many artifacts displayed in the Fire Museum of Maryland’s new exhibit, including the Form 4 console (large grey box) and the 3-dial transmitter (far left).
With the current emphasis on “green” or sustainable technologies, it is important to note that even in the 19th century fire departments held energy conservation in high regard. Even as electricity was introduced to cities large and small, municipal fire-alarm systems remained low-demand users. Many street corner call boxes were powered by springs or weights, which required manual winding; central-alarm office registers and transmitters were also powered by springs and weights, respectively. Even into the 1960s, the use of line-transmitted electricity to power alarm boxes was deemed an unnecessary hazard by most departments.

As with many technologies, miniaturization played a significant part in fire-alarm communications throughout the 20th century. By the 1940s, Gamewell had introduced the Form 4 console, which consolidated the receiving, recording, and transmission abilities of the earlier registers and transmitters. These consoles were commonly used on large industrial campuses, hospitals, military bases, and similar establishments. The Fire Museum of Maryland’s Form 4 console, which was in use from about 1940 to 1960 at the Bethlehem Steel facility on Sparrows Point, combines the operations of three separate machines (register, take-up reel, and transmitter) into one.

The final portion of the new exhibit includes the introduction of radio, computers, and wireless technologies. Again, miniaturization played an important role in allowing those in the fire service to transmit their communications swiftly and with limited interference. No longer did an officer need to stand at an alarm box on the street corner, tapping out a message to the central-alarm office with a telegraph key.

While some communities still use their street-corner alarm boxes to report fires and other emergencies, the introduction of the 9-1-1 system and its accompanying computer systems signaled the eventual demise of many fire-alarm registers. Most large communities are primarily, if not entirely, digital, and the recordation of alarms is often digital as well. Nevertheless, the use of multiple-circuit registers in central-alarm offices continues in some cities, including New York, Boston, Harrisburg, Pa., and Frederick, Md.

The museum is open from 10 am until 4 pm every Saturday year round, and Wednesdays through Saturdays in June, July, and August. Additional information is available by calling (410) 321-7500 or visiting www.firemuseummd.org.

Alex Guerrieri

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**Annual Conference** (continued from page 3)

provide computers, projectors, screens, microphones, and speakers in each presentation room.

Proposal Formats: Proposals should be submitted electronically (Microsoft Word .doc/.docx or OpenOffice Open Document Format Text .odt). Each proposal must include: 1) the presentation or poster display title; 2) a 300- to 500-word abstract with a detailed discussion of points, findings, and conclusions; a brief biographical statement of 75 to 150 words for each presenter; 3) contact information including mailing address, telephone number, and email address for each presenter; and 4) the software version used to create your presentation and a list of additional audio-visual requests beyond the standard equipment listed above. For 90-min. themed sessions or panel discussions, the organizer should submit all abstracts together as a group, accompanied by a title and a brief description of the theme. If any of these items is missing, the proposal cannot be considered. Note that the above word limits apply separately to each presenter in a group.

Presenters are encouraged to consider transforming their presentations into articles for IA: The Journal of the Society for Industrial Archeology. Recording of audio for free distribution by podcast is also encouraged, but prior written consent must be obtained from each presenter being recorded and from the SIA Board. No conference proceedings are published.

The deadline for proposals is Jan. 31, 2015. Send proposals or questions to Maryellen Russo, SIA Presentations Committee Chair, mrusso@blantonassociates.com; 5 Lakeway Centre Court, Ste. 200, Austin, TX 78734; (512)-695-4774.

All presenters interested in participating in the 24th Historical Bridge Symposium should submit proposals to Kitty Henderson, kitty@historicbridgefoundation.com; Historic Bridge Foundation, Box 66245, Austin, TX 78766; (512) 407-8898.

**Student Travel Scholarships**

The SIA awards travel scholarships to help full-time students and professionals with less than three years of full-time experience to offset some of the expenses of attending annual conferences. To apply, send a letter of interest demonstrating a commitment to IA and a letter of reference to Maryellen Russo, SIA Scholarships, 5 Lakeway Centre Court, Ste. 200, Austin, TX 78734; mrusso@blantonassociates.com. Deadline for applications is Mar. 31, 2015.

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Postcard: Hudson River, Night Scene, Collar District, Troy, N.Y.
2015 SIA GENERAL TOOLS AWARD
Call For Nominations

The General Tools Award Committee invites and encourages SIA members to submit nominations for the SIA General Tools Award for Distinguished Service to Industrial Archeology. This is the highest honor the SIA can bestow to recognize individuals who have given sustained, distinguished service to the field of industrial archeology and is presented at the SIA's annual business meeting.

Criteria for selection are as follows: (1) the recipient must have given noteworthy, beyond-the-call-of-duty service, over an extended period, to the cause of industrial archeology; (2) the type of service for which the recipient is recognized is unspecified, but must be for other than academic publication; (3) it is desirable but not required that the recipient be, or previously have been, a member of the SIA; (4) the award may be made only to living individuals. Teams, groups, agencies, firms, or any other collective entities are not eligible.

The nomination should address the specific accomplishments that qualify the nominee for the award. Supplementary material (the candidate's resume, for example) may be appended to the nomination. Nominations must also include the name, address, telephone number(s), and e-mail of the nominator. Any SIA member in good standing may make a nomination, and there are several ways to forward nominations. You can write a statement of 2-3 pages, or write a partial nomination describing one sector of the person's work you know best, with suggestions of others who might add details of other aspects of the candidate's career. Nominations also can be collaborative efforts submitted by two or three members. Examples of successful nominations appear on the SIA website for many of the members who have received the award to date: www.sia-web.org/activities/awards/general-tools-award.


The General Tools Award was established in 1992 through the generosity of Gerald Weinstein [SIA], then chairman of the board of General Tools & Instruments Co. LLC. High Road Capital Partners acquired General Tools & Instruments LLC in February 2014 and they are happy for SIA to continue using the company's name on the award, which will continue to be funded by the Abraham and Lillian Rosenberg Foundation. The Rosenbergs founded General Hardware, the predecessor to General Tools. The award consists of a citation, a commissioned sculpture (“The Plumb Bob”), and a cash award.

Please send your nominations by Mar. 1, 2015 to Helena Wright, Chair, General Tools Award Committee, 4628 49th Street NW, Washington, DC 20016 or by email to wrighth@si.edu. For more information, email or phone Helena on 202-633-3835 (w) or 202-966-1558 (h).

NOTES & QUERIES

Textile Machinery Available. Thistle Hill Weavers (tour site—2012 SIA Fall Tour, Utica), located in Cherry Valley, N.Y., has a skein-to-bottle bobbin winder made in Paterson, N.J., in excellent working condition with all parts ready to be delivered. It can be converted to a cone winder from skeins. They also have two Halton Jacquard heads, a piano punch, and two C and K looms from the Philadelphia School of Textiles. These are free and have been kept inside. They will need to be rigged and removed from ground level. Info: Rabbit Goody, (518) 284-2729; rabbitgoodyhw@gmail.com.

Do You Recognize This Power Plant? It was found in a book on Belgium but is not located in Belgium, and probably not in France, Germany, or the U.K. The flat roofs of the houses surrounding the plant have led the researcher to believe that it may be located in the U.S. If you can offer assistance, contact Pieter De Raedt, pidera@yahoo.co.uk.
GENERAL INTEREST


- Simine Short. Locomotive to Aeromotive: Octave Chanute and the Transportation Revolution. Univ. of Ill. Pr., 2011. 358 pp. $25. This first full biography of Chanute traces his career from a railroad engineer to a pioneer of aviation. He is known for laying out America’s two largest stockyards (Chicago in 1865 and Kansas City in 1871), working to standardize railroad rolling stock and gauge, and refining ways to preserve wood for ties. Retiring as a consulting engineer in 1890, Chanute dedicated his later life to the science of aviation, believing that heavier-than-air flight was possible, based on his observations of wind effects on roofs and bridge struts. He is probably best known for his correspondence with the Wright brothers, providing them with key information and encouragement. Rev.: T&C, Vol. 54, No. 2 (Apr. 2013), pp. 414-15.

AGRICULTURE & FOOD PROCESSING

- Helen Anne Curry. Industrial Evolution: Mechanical and Biological Innovation at the General Electric Research Laboratory. T&C, Vol. 54, No. 4 (Oct. 2013), pp. 746-81. History of a “failed” GE research program of the 1920s and the 1930s that subjected various plant species to x-rays to improve crop, fruit, and flower varieties. Although the technology did not perform the functions envisioned for it, the author asserts that these experiments reveal a host of underlying ambitions that still drive modern biotechnology.


- Lisa M. Hamilton. The Quinoa Quarrel: Who Owns the World’s Greatest Superfood? Harper’s Magazine (May 2014), pp. 35-42. Bolivia largely controls the genome for quinoa, a resilient and nutritious grain. While this helps Andean farmers earn a living, it has also slowed research to adapt the plant for growing in other parts of the world.


- Sally McMurry. The Impact of Sanitation Reform on the Farm Landscape in U.S. Dairying. B&S, Vol. 20, No. 2 (Fall 2013), pp. 22-47. History of the milk house, a new building form that developed in response to regulations designed to keep milk disease-free and safe to drink in the age before pasteurization.


- Richard Dwight Porcher, Jr., and William Robert Judd. The Market Preparation of Carolina Rice: An Illustrated History of Innovations in the Lowcountry Rice Kingdom. Univ. of S.C. Pr., 2014. 408 pp., illus. $59.95. Multidisciplinary study of the rice industry in South Carolina from its beginnings in the 1670s to its demise in the 20th century. Detailed illustrations and descriptions of the implements and machines used to prepare Carolina rice for overseas markets. The book begins with the preindustrial techniques used by African and African-American slaves and workers in the late 1600s and early 1700s and concludes with the water- and steam-powered machines that drove rice threshing and milling until the end of the industry in 1911. In great detail, the authors reveal the immense and continually evolving technological innovations of an agricultural industry that spanned the Industrial Revolution.
and much of the history of the colony and state. They assert
that continual investment in land, labor, and mechanization
sustained profits in a globally expanding market until a series
of post–Civil War events outside rice planters’ control led to
the abandonment of rice culture.

Lucy B. Wayne [SIA]. Sweet Cane: The Architecture of the
Sugar Works of East Florida. Univ. of Ala. Pr., 2010. 176 pp., illus. $22.50. Investigation of the remains of eight 18th-
and 19th-century sugar plantations in present-day Flagler
and Volusia counties. Provides an overview of the regional
industry and how plantations adapted to changing technology
including steam power. Rev: B&S, Vol. 20, No. 1 (Spring
2013), pp. 135-36.

Amrys O. Williams. Exhibit Review: FOOD: Transforming
2013), pp. 947-56. Scholarly review of the National Museum
of American History (Smithsonian Institution) exhibit that
opened in Nov. 2012 and runs through 2015. The exhibit has
the ambitious goal of telling the story of American life in the
second half of the 20th century by using food as a lens through
which to examine technological changes, environmental
transformations, shifts in rural society and suburban
consumerism, and concerns for personal health and safety.

ARMS & MUNITIONS

Christopher Gainor. The Atlas and the Air Force:
Reassessing the Beginnings of America’s First
Intercontinental Ballistic Missile. T&SC, Vol. 54, No. 2
of American History (Smithsonian Institution) exhibit that
opened in Nov. 2012 and runs through 2015. The exhibit has
the ambitious goal of telling the story of American life in the
second half of the 20th century by using food as a lens through
which to examine technological changes, environmental
transformations, shifts in rural society and suburban
consumerism, and concerns for personal health and safety.

Tim Gale. The French Army’s Tank Force and Armoured
By the end of the war, France boasted the largest and most
advanced tank force in the world. This book examines the
force’s performance during WWI and argues that the French
army used tanks as intelligently as possible given the immature
state of the technology.

Brett Holman. The Next War in the Air: Britain’s Fear of
Examines the development of the military theory that Britain
was vulnerable to a sudden, destructive aerial bombardment
of its cities. This theory was promoted to the public and so widely
accepted that it influenced how the British people responded
to some of the great policy issues facing them in the 1930s.

WATER SUPPLY & CONTROL

Frederick Kaufman. The Man Who Stole the Nile: An
Ethiopian Billionaire’s Outrageous Land Grab. Harper’s
Magazine (July 2014), pp. 36-42. Using land leased from the
Ethiopian government at the headwaters of the Nile, Sheikh
Mohammed Hussein Al Amoudi is growing rice for export to
Saudi Arabia. Kaufman asserts that the effect is similar to that of
the contentious and incomplete Grand Ethiopian Renaissance
Dam, i.e., drawing water from the river before it enters Egypt.

Leslie Rosenthal. The River Pollution Dilemma in Victorian
on how the British legal system coped with water pollution
and the challenges arising from the scale of untreated wastes
during the second half of the 19th century.

BRIDGES

effort between the Indiana Dept. of Transportation and the
Kentucky Transportation Cabinet, the recent replacement
of the Milton-Madison Bridge over the Ohio River [SIA
2014 Fall Tour, Madison, Ind.] involved sliding a 15,000-ton,
2,428-ft.-long, four-span truss 55 ft. laterally from temporary piers onto permanent substructure.

Covered Bridge Topics, Vol. 71, No. 3 (Summer 2013)
includes A Visit to New Castle County, Delaware (brief report
and photographs from a tour of covered bridges in 1956 by
Herbert Richter); A Historical Tour of Albert County, New
Brunswick (covered bridges in 1976 and today); Berks County
(Pa.) Framing Specialties (focus on a Burr-type pony truss
and distinctive lower-lateral bracing); and Humboldt County,
California in the Olden Days (Chester H. Thomas collection of
covered bridge photos from the 1920s and 1930s).

Frank Griggs, Jr. James River Bridge at Richmond, Virginia.
portability of American engineering expertise in the mid-19th
century, Griggs describes how engineer Moncure Robinson
surveyed and designed canals and railroads throughout
Virginia and eastern Pennsylvania. His bridge across the James
River for the Richmond & Petersburg RR was notable for its
combination of height (60 ft.) and length (2,844 ft.).

BUILDINGS & STRUCTURES

Laura Ewen Blokker and Heather A. Knight. Louisiana
Bouillage: The Migration and Evolution of French Building
Techniques in North America. CH, Vol. 28, No. 1 (2013),
pp. 27-48. Bouillage is a tempered earthen wall infill born of
Native American and French construction traditions and
used continuously in Louisiana during the 18th and 19th
centuries. Includes data from surveys of extant structures,
archival research, and interviews with contemporary bouillage
builders.

Benjamin Ibarra-Sevilla. The First Ribbed Vaults in the
Americas: Craft Skills and Construction Process of
Indigenous People in the Mixtec Region of Southern
Spanish construction techniques transferred to native people
in the 16th century. Looks closely at three buildings dressed
with elaborate ribbed vaults and erected between 1530 and
1580.

Elyse Gunderson McBride. The Changing Role of the
Architect in the United States Construction Industry. CH,
Vol. 28, No. 1 (2013), pp. 121-140. Discusses the changes in
the working practices of important New York and Chicago
architects between 1890 and 1910 to meet the unprecedented
demands of developers and general contractors. The role of
the architect changed from that of a master builder to that of a
project manager, creating the approach to building design and
construction that is practiced today.

Michael J. O’Brien. Load-Bearing, Single-Wall Constructions
from Shanties to Structural Insulated Panels. CH, Vol. 28,
No. 1 (2013), pp. 49-63. The single-wall form of construction
uses a single layer of boards to be both a weather membrane
and load-bearing member. It has been widely used but rarely
studied. This paper explores surviving late-19th-century examples to illustrate the details of this form of construction and compares them to more contemporary construction technologies.

Avigail Sachs and Tricia A. Stuth. *Innovation and Tradition: Eighty Years of Housing Construction in Southern Appalachia*. CH, Vol. 28, No. 1 (2013), pp. 65-82. Beginning with the Tennessee Valley Authority’s “Norris House” of the 1930s and wartime trailer housing of the 1940s, charts the development of the prefabricated housing industry as a regional response to the need for affordable housing.


**Iron & Steel**

Jeffrey T. Manuel. Mr. Taconite: Edward W. Davis and the Promotion of Low-Grade Iron Ore, 1913-1955. T&C, Vol. 54, No. 2 (Apr. 2013), pp. 317-345. Davis, a mining engineering professor at the University of Minnesota, was instrumental in developing taconite as a tool for the economic development of the state’s Mesabi Iron Range. This article looks at the technology of producing taconite and Davis’s activism that pushed public opinion and legislation toward outcomes that supported an industrial system built on taconite.

Eileen McClelland. *Bruno Fine Jewelers. Instore: The Magazine for the American Jewelry Store Owner* (Aug. 2014), pp. 101-07. This jewelry store in rural Mercer, Pa. is located on the site of the Springfield Iron Furnace (SIAM, Spring 2013). Owner Larry Bruno has sponsored archeological investigations since 2007, incorporating the stabilized ruins into the landscape of the store, which overlooks the furnace site. The store won an award as one of America’s “coolest” jewelry stores with the history of the furnace and its archeology considered one of the factors that makes it an interesting destination for customers seeking fine jewelry.


**Mines & Mining**

Janet Floyd. *Claims and Speculations: Mining and Writing in the Gilded Age*. Univ. of N.M. Pr., 2012. 184 pp., illus. $45. Explores the diverse literature of gold and silver mining in the American West, including the fiction of Bret Harte and Mark Twain. Rev.: MHJ (2013), pp. 108-09.

Christopher J. Huggard and Terrence M. Humble. Santa Rita del Cobre: A Copper Mining Community in New Mexico. Univ. Pr. of Colo., 2012. 252 pp. $45. Opened by the Spanish in the 18th century, the mine at Santa Rita del Cobre claims to be the longest continually operating mine in the western mining region and to have produced more copper than all of the mines in Michigan’s famed Keweenaw district. This history of the mine addresses technologies, labor relations, and community. Rev.: T&C, Vol. 54, No. 2 (Apr. 2013), pp. 410-12.

*Mining History Journal* (2013) includes Robert L. Spude, “Men of Scope”: The Assayer and the Western Mining Community, 1848-1920 (The life of assayers who followed mining camps and sometimes established a steady business after the boom when one or two assayers remained to handle testing ores. Includes architectural description of assay offices and equipment.); Henry Djerlev, My Recollections of the Cinnabar Creek Mine, Aniak District, Alaska, in 1970 (experiences of a junior geologist at a remote mercury mine); William Hawes, A Monument Should Be Built Honoring These Guys: The Invention of the Mucking Machine (development in the 1930s of an overhead mucking machine for removing broken rock, called muck, following a blast); Philip Mosely, Lights! Camera! Fire! Centralia Pennsylvania on Film (Coverage of the famous fire that has been burning in a labyrinth of abandoned coal mines under the now-abandoned town of Centralia since 1962. Discusses the first documentaries produced by PBS in the early 1980s, as well as subsequent efforts.); Teresa M. Houser, Native American Sovereignty and Coal Mining in the Powder River Basin (tribal governments have been tested by conflicting policies, some welcoming coal mining as economic opportunity and others wary over environmental impacts and sudden social changes); James B. Copeland, Mining Stock Exchange and Financing the Colorado Mining Industry, 1864-1900 (The how and why of specialized stock exchanges and their role in financing both small and large operators. The exchange was a place for mining companies to distribute prospectuses, maps, ore samples, and reports by experts).

Nicholas A. Robins. *Mercury, Mining, and Empire: The Human and Ecological Cost of Colonial Silver Mining in the Andes*. Indiana Univ. Pr., 2011. 298 pp. $45. Examines silver mining industry, and large operators. The exchange was a place for mining companies to distribute prospectuses, maps, ore samples, and reports by experts).

**CONTRIBUTORS TO THIS ISSUE**


*With Thanks.*
and mercury mining and production in the Andes following the Spanish invasion in the 16th century. Mercury poisoning from the amalgamation processes devastated the Inca people who were pressed into service and amplified European perceptions that the afflicted natives were subhuman. Rev.: T&C, Vol. 54, No. 4 (Oct. 2013), pp. 973-75.


**Water Transport**


**Railroads**


◆ Alexander B. Craghead. The Modern Streetcar, Transit or Time Machine? NRHS Bulletin (Fall 2013), pp. 4-39. As dozens of American cities construct new streetcar lines, the author poses the question of what distinguishes them from their historical predecessors. Despite the obvious technological advances, among the conclusions is that streetcars have historically and today played a role in fostering middle-class urban development. Historically, however, streetcars were enablers of upward mobility, whereas today they serve as tools for urban revitalization, often displacing lower income citizens.


◆ Timber Transfer, Vol. 26, No. 2 (Summer 2013) includes articles on the East Broad Top RR's Robertsdale yards and on the Woodvale Shops. Also an article on the railroad's transit company, which offered passenger bus service during the 1930s. Published by Friends of the East Broad Top. Avail. with membership. $30/yr. www.febt.org.

◆ Tourist Railroads & Railway Museums, (Spring 2013) includes Tom Klobas, The Incomplete Saga of Southern Office Car #16 (extensive historical background of the 1879 standard-gauge business car at the Arizona Ry. Museum, builder unknown); Aron Isaacs, Chippewa Valley Railroad (review of the tourist railroad in Duran, Wis.); and Frank Kyper, Rails Hawai'i 2012 (review of tourist railroads on four of the islands). The Winter 2014 issue includes Aron Isaacs Return to Orange Empire (review of tourist railway and museum in Riverside, Calif.) and Pacific Southwest Railway Museum (review of museum in Campo, Calif.); and Jim Pettyleaf, Caring for AN F-M (very detailed description of maintenance program for the retired Army Transportation Corps WWII-era diesel locomotive at the Golden Gate RR Museum). Info: www.atrrm.org.

**Abbreviations:**

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**Publications of Interest** is compiled from books and articles brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books and articles, especially those in their own areas of interest and those obscure titles that may not be known to other SIA members. Publications of Interest, c/o SIA Newsletter, 305 Rodman Road, Wilmington, DE 19809; phsianews@aol.com.
Long-time SIA member Richard E. Greenwood died on October 22, 2014 at his home in Barrington, R.I. The cause was advanced cancer. His death was not unexpected, but that does not make it any easier for his family, friends, and professional colleagues to accept. He was 61 years old. He is survived by his wife Ginny, his three children, and his two grandchildren.

Rick was a wonderful person and a dedicated industrial archeologist. A fellow SIA member has commented that, with his passing, “the world most assuredly lost one of the good guys.” Everyone who knew Rick will feel a void and miss his engaging personality. Our field will be without one of its best practitioners, a fine writer who also enjoyed getting his hands dirty. He always did superior work as a preservationist and as a scholar. He was equally adept in archives, classrooms, museums, and preservation meetings. He could read a building, analyze a waterpower site, or dig through archeological strata as well as anyone. Whenever he led a tour or delivered a conference paper, you knew you were listening to an expert with a genuine enthusiasm for industrial history.

Rick served the SIA as a national board member and as both president and treasurer of the Southern New England Chapter. He played a key role planning our TICCIH excursion to Rhode Island and Southeastern Massachusetts in 1984, our fall tour of Rhode Island and coastal Connecticut in 1986, and our 2004 annual conference in Providence. For many years, he also chaired the SIA’s Historic Preservation Advocacy Committee. He was president of the New England chapter of the Vernacular Architecture Forum (VAF) and an organizer of its national conference in Newport. His many guidebook entries were models of clarity and accuracy. His articles in IA, as well as his many other publications and his curated exhibits, were important scholarly contributions.

Early in his career, Rick was a historian for the National Landmarks Program and a preservation planner for the Maryland Historical Trust. After graduating from the University of Pennsylvania in 1974, he went on to earn an MA in Museum Studies and a Ph. D. in American Civilization from Brown University. Later he held positions as a visiting assistant professor at Brown and an assistant professor at Roger Williams University. He worked for the Rhode Island Historical Preservation and Heritage Commission for more than 25 years, serving as project review coordinator, deputy director, and deputy SHPO (State Historic Preservation Officer). Rick also served his local community with 20 years of effort on the Technical Review Committee of the Barrington Planning Board.

Special knowledge can be impressive, but Rick’s breadth of expertise was astounding. He seemed to be personally familiar with every historical site in Rhode Island and well-informed about countless places far afield. His publications, preservation reports, exhibits, and presentations were interdisciplinary and often path-breaking. Rick was the authority on the great mill engineer and entrepreneur Zachariah Allen; the history of the Blackstone Canal; the mill villages and waterpower systems of the Blackstone River Valley; the cotton textile mill as both a physical structure and a complex system of production; and the use of tidal power on the coast of southern New England. He co-authored The Historic and Architectural Resources of Barrington, Rhode Island (for the state of Rhode Island); The Blackstone River Valley and Providence (for the VAF); and Providence, Rhode Island (for the SIA). He wrote multiple articles for IA and for Rhode Island History; a key chapter for Landscape of Industry: An Industrial History of the Blackstone Valley; and entries on industrial architecture for Buildings on Paper: Rhode Island Architectural Drawings, 1825-1945.

(continued on page 19)
Social Media and Shoe Leather
Save Historic Dry Cleaning Plant

Atlanta preservationists used old-school preservation tactics and social media to score a rare victory late last summer. The digital and analog appeals to city leaders halted the demolition of a historic dry cleaning and dye works plant formerly owned by the Trio Steam Laundry Co. The 104-year-old building, which is now owned by the Atlanta Housing Authority (AHA), was prepped for demolition in Aug. 2014. Parts of its cornice were removed and the interior was gutted before work crews were told to stop pending a review by agency officials. The temporary reprieve became permanent when AHA began consultations on stabilization solutions with municipal and state historic preservation agencies.

Trio Steam Laundry was founded in the 1890s and became one of Atlanta’s earliest large-scale commercial laundries. Its original plant was on Edgewood Ave. in the central business district. About 1905, the business moved to a new brick building east of downtown at the corner of Tanner and Hilliard streets. Now known as Atlanta’s Old Fourth Ward neighborhood, it is a gentrifying area with historic light-industrial buildings, single-family homes, civil-rights landmarks, and hip bars and restaurants.

By 1910 Trio’s business had sufficiently grown that it acquired a second parcel across Hilliard from its earlier property, where it built a two-story brick dry cleaning plant. Trio occupied its Hilliard St. facilities until the early 1940s. About 1945, Trio sold its earlier building at 19 Hilliard to the Atlanta Brush Co. That property was rehabilitated into lofts, and in 1997 it was listed in the National Register of Historic Places.

The area where Trio built its dry cleaning plant became a predominantly African-American neighborhood in the first half of the 20th century. Martin Luther King Jr. was born less than half a mile from the building, and Auburn Ave., Atlanta’s “Black Main Street,” is only one block away. Postwar freeway construction and institutional racism isolated the Old Fourth Ward from Atlanta’s downtown business district. Desegregation, disinvestment, and flight to the suburbs contributed to the neighborhood’s disintegration in the last half of the 20th century.

By the turn of the 21st century, heritage tourism tied to sites commemorating King and other civil-rights landmarks spurred renewed economic and community development efforts. New mixed-use projects and business incubators emerged throughout the neighborhood after 2000. The Belt Line trail, a converted industrial rail corridor that is striving to be Atlanta’s answer to Manhattan’s High Line, is spurring new investments putting pressure on property owners to decide between adaptive use and demolition. The new boom is displacing businesses and residents. This gentrification was documented by journalist Nathan McCall in his 2007 novel, Them.

The former Trio dry cleaning building is a contributing property in the Martin Luther King Jr. Historic District (National Register) and the Martin Luther King Landmark District (City of Atlanta). Historic preservation efforts in the neighborhood date to the 1970s. These efforts include the Historic American Building Survey (HABS) documentation of the Auburn Ave. corridor. The interest in old buildings and spaces in Atlanta’s Old Fourth Ward appears to be closely tied to gentrification. This connection wasn’t lost on McCall, who fictionalized the ways in which preservation was used to increase property values and stabilize the neighborhood. “They could start … by requiring all businesses to spruce up their premises to comply more fully with historic preservation guidelines,” McCall wrote in Them.

Preservation advocates hold signs thanking morning commuters for their support after the city stopped demolition.
The AHA bought 20 Hilliard St. in 2009. It had been owned by a private developer, and by that time the building had been vacant for many years. By 2014 the roof had collapsed, and according to documents obtained by Atlanta preservationists, the building was in an advanced state of disrepair. In addition to deterioration, there were issues of environmental remediation that were left deferred through the years of private ownership and under the AHA. Historical fire insurance maps show three functional areas inside the building during its years as a dry cleaning plant: cleaning, dye room, and rug cleaning. Chemicals used in 20th-century dry cleaning plants are well-documented soil contaminants. These include perchloroethylene (PERC), gasoline, and carbon tetrachloride.

The AHA receives federal funding, and it is required to comply with Section 106 of the National Historic Preservation Act. Like many federally funded and licensed entities, the AHA fulfills much of its compliance obligations through a programmatic agreement that streamlines the consultation process. One situation that allows for expedited Section 106 consultations and local regulatory review involves the demolition of unsafe buildings, and in late 2013 the AHA began the process to secure the required regulatory approvals for demolition. The AHA got a staff-level demolition approval from the city’s historic preservation review authority, the Atlanta Urban Design Commission, and consultations with Georgia’s state historic preservation office were concluded.

A resident who regularly passes by Hilliard Street alerted community leaders and preservationists to the appearance of demolition equipment and a new fence around the property. Emails, Facebook posts, and Tweets about the impending demolition began appearing. Preservationists created a “Save the Historic Trio Building” Facebook page, a Twitter account (@LaundryTrio), and Tweets with the hashtag #Save20Hilliard were directed at Atlanta Mayor Kasim Reed, U.S. Rep. John Lewis, and other community leaders.

The social media campaign quickly yielded articles in print and online publications, including the Saporta Report and Creative Loafing. Local television and radio stations broadcast segments on the building, and bloggers posted frequent updates on the fast-moving advocacy effort.

Demolition stopped the week before Labor Day, and Atlanta’s mayor on Aug. 26 responded to a Tweet from the @LaundryTrio account, “We are listening.” The AHA soon issued a press release: “The Atlanta Housing Authority, following an outcry from city residents and historic preservationists, announced that it is halting demolition of the structure at 20 Hilliard Street in order to reassess if it is possible to salvage the structure.”

Preservationists and community activists celebrated on Hilliard Street the Friday before Labor Day. They made signs expressing their wishes for adaptive use for the Trio building and gathered for a group photo. Charles Lawrence, a preservation architect and founder of the Atlanta Preservation Professionals Facebook group, wrote in a post on the group’s page, “This was no accidental campaign.” He added, “The strategies and tactics used to get the attention of press and politicians are time tested. Social media is a powerful tool, and so too are phone calls, texts, and letters.”

Reports emerged in early September that the city had abandoned its plans to demolish the Trio building. In October the AHA held its first meeting of the Trio Laundry Building Community Advisory Group to discuss the property’s future. Updates on the latest developments at this historic building may be found at the Trio building’s Facebook page, www.facebook.com/triolaundry.

David S. Rotenstein

Preservationists’ signs affixed to the Trio building’s Hilliard Street façade.

Trio dry cleaning building north façade with “Save Me” printed across the sealed windows.
Chamberlin Mill (Woodstock, Conn.) has received a generous grant from The Summer Hill Foundation, a private organization dedicated to preserving land and historical structures. Summer Hill's assistance will allow the non-profit Chamberlin Mill, Inc., to restore the dry laid stone supports of the rare 19th-century sawmill (tour site—2011 SIA Fall Tour, Quinebaug River). The Chamberlin Mill recently received an SIA Industrial Heritage Preservation Grant to assist with the preparation of architectural plans and specifications in anticipation of restoration work. With this additional funding from Summer Hill, Chamberlin Mill is actively seeking a masonry contractor with strong experience in dry-laid historical foundations to begin work in early 2015. Info: www.chamberlinmill.org.

M.M. Rhodes & Sons, Inc. in Taunton, Mass., ceased operations in May 2014, after more than 153 years in operation by the Rhodes family. The company was established in 1861 by Marcus Morton Rhodes for the manufacture of small metal items such as coffin tacks, hoopskirt trimmings and upholstery nails. By the late 1860s, Marcus had perfected a machine for the manufacture of papier-mâché shoe buttons. This became the primary business for several decades. Since the 1920s, the company has focused on a variety of products for the telephone and electrical industries, including insulated staples and cable/conduit clamps in various shapes and sizes. Much of the vintage machinery is still powered by a belt-and-pulley system, adapted long ago for electric-motor drive. The small factory complex also contains the original forge along with the “paint shop” building, an 1850s-era wooden production shed that was originally built as an umbrella factory. It was adapted into a “Japanning house,” and contains a number of specialized ovens with a system of rails, trolleys, and trays used in the finishing process. Fifth-generation owners George and Tim Rhodes gave a tour to the SNEC-SIA on June 21, 2014 in an effort to raise awareness of their unique site (see Chapter News). They are currently in the process of having the property listed on the National Register of Historic Places, and hope to preserve the long and diverse history of the family business. They are seeking advice and suggestions from SIA members on how to best preserve this significant industrial site. Please contact Marc N. Belanger (mnbelanger@comcast.net) for more info.

The Brown Bridge in Rutland County, Vt., and the Duck Creek Aqueduct in Franklin County, Ind., were officially listed as National Historic Landmarks in Sept. 2014. This achievement represents a 12-year effort by the National Park Service's Historic American Engineering Record as part of the Federal Highway Administration’s National Historic Covered Bridge Preservation Program (NHCBP). Brown Bridge, constructed in 1880, is one of the most outstanding surviving examples of a Town lattice truss, a widely popular construction method throughout the 19th century that could be erected inexpensively using machine-fabricated timber elements. Duck Creek Aqueduct, constructed around 1846 on the Whitewater Canal, is the only surviving historic covered wood aqueduct in the U.S. These two covered bridges join the Humpback Bridge in Virginia and the Knight's Ferry Bridge in California, which were designated in 2012. A fifth bridge, the Powder Works Bridge in California, is in the process of being nominated. Historian Lola Bennett wrote all of the nominations, as well as researched and authored the National Covered Bridge Context Study for NHCBP. Christopher Marston [SIA] was the project leader. The nominations are available from the NHL’s website: www.nps.gov/nhl/news/fall2013mtg.htm.

The Keweenaw National Historical Park Advisory Commission has acquired the historic Quincy Smelting Works (tour site—1997 Annual Conference, Houghton, Mich.). The Advisory Commission finalized the purchase from Franklin Township on Aug. 29, 2014. Built by the Quincy Mining Co. in 1898, the works is the most complete late-19th-century copper smelting facility left in the world. The remaining industrial structures and equipment provide a unique opportunity to explore an important part of the copper production story. Although the property deteriorated in the decades after its closing, recent efforts by Franklin Township, the National Park Service (NPS), and the Environmental Protection Agency have helped make the site safer for public tours. By acquiring the property from Franklin Township, the Advisory Commission is now poised to work with the NPS and the Quincy Smelter Association to further preservation and interpretation. Ultimately, the commission intends to transfer the property to the NPS to ensure its long-term protection. The Commission sends

(continued on page 17)
Call for Papers. The Southern New England Chapter of the SIA invites proposals for papers to be presented at the 28th 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 of our industrial past. The conference will be held at the former Fire Alarm & Telegraph Building (managed by Preservation Worcester) in Worcester, Mass., on Sat., March 7, 2015. 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. 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 PDF format, or presenters may bring their own laptops for connection to the a/v equipment. Proposals submitted in PDF or MS Word format must be received by Jan. 31, 2015. For info or to submit a proposal: Marc N. Belanger, 161 Highland St., Taunton, MA 02780; mnbelanger@comcast.net.

Iron & Steel Preservation Workshop, March 9-10, 2015. Lansing [Mich.] Community College (LCC) will be offering a two-day workshop of presentations and demonstrations to promote and improve skills related to the repair, rehabilitation, and restoration of iron and steel. Expert speakers will be on hand to talk about their research and preservation projects during the first day, and the college’s skilled craftsmen and instructors will offer demonstrations and hands-on training making use of the college’s state-of-the-art workshops and labs during the second day. LCC is accredited by the International Association for Continuing Education and Training and will issue continuing education units to participants at the end of each conference day. Scholarships to attend the workshop will be awarded to undergraduate and graduate students in welding, engineering, historic preservation, and related fields. Info: Vern Mesler, meslerv@gmail.com.

thanks to the Americana Foundation and the many corporate and individual donors who helped make this purchase possible. Info: Scott See, (906) 483-3040; scott_see@partner.nps.gov.

The Buffalo, N.Y., and Hamilton, Ont., Sections of the Institute of Electrical and Electronic Engineers (IEEE) met in Niagara Falls, Ont., to tour the Rankine (Canadian Niagara) Generating Station (tour site—1984 SIA Fall Tour, Niagara Falls). This plant was also known as Power House No. 3 of the Niagara Falls Power Co., being a sister station of Adams Stations Nos. 1 and 2, located on the U.S. side of the falls. In 1895, Adams Station No. 1 was the first in the world to generate and transmit large blocks of polyphase alternating current. The Rankine Station resembles the Adams stations in many ways and as such offers a glimpse into the early power technology as it was evolving at the turn of the century. Today, nearly 110 years after it first produced power in 1905, it still is in reasonably good condition although decommissioned for approximately 10 years. Like the Adams stations, the Rankine is a deep-wheelpit plant. A slot was cut in the rock to a depth of approximately 150 ft. into which were placed the turbines and associated mechanical equipment. Water was brought into the plant from the Niagara River just above the falls and then through outer and inner forebays. It then passed head gates and entered the 11 penstocks, one for each unit. The turbines were rated at 10,000 hp (units 1-5) and 12,500 hp (units 6-11). At the time the Rankine station opened

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The Best Friend of Charleston Train Museum opened on May 9, 2014 at a downtown location adjacent to the Charleston (S.C.) Visitors Center. The Best Friend of Charleston is a full-size replica of a locomotive built at the West Point Foundry in New York and shipped to Charleston to make its inaugural run on Christmas Day, 1830. The replica was constructed by the Southern Ry. in 1928 to commemorate the 100th anniversary of the South Carolina Canal & Rail Road Co., the Southern’s oldest corporate predecessor. It was donated to the City of Charleston in 1993. The Best Friend was recently refurbished in Norfolk-Southern’s Chattanooga shops and returned to pristine condition for display in a new gallery. Info: www.bestfriendofcharleston.org.—NRHS News (Aug. 2014)

The New York Transit Museum’s newest exhibition, Railroad Landscapes: Photographs by John Sanderson, traces the tracks of the Long Island RR and Metro-North RR through the natural and built environments of New York State, capturing beauty and desolation in the landscape. The exhibition features close to 20 large-format contemporary images by John Sanderson. The exhibition runs through Feb. 1, 2015 at the museum in downtown Brooklyn. Originally focused on railroad rolling stock and operations, Sanderson’s recent work highlights the ever-changing physical surroundings of rail lines, using the tracks as a means to explore American landscapes. This exhibition features large, rich-color prints alternating between two formats—the 4:3 aspect ratio and the panoramic format— including two images stretching to nearly 10 ft. along the walls of the museum’s gallery. The photos capture expansive skies, changing seasons and early morning light along the tracks while telling stories of railroading’s past in New York. One photograph shows the abandoned Glenwood Power Station in Yonkers, designed in the early 1900s by Grand Central Terminal architectural firm Reed & Stem for the newly electrified New York Central. Closed for 50 years, its smokestacks still loom over the nearby Metro-North station. Another photograph shows the 1929 Buffalo Central Terminal, now an expansive ruin from New York Central’s heyday as a vital link between the Northeast and Midwest, built to accommodate thousands of passengers per hour. Info: http://web.mta.info/mta/museum.


in 1905, there were five other large generating stations at Niagara Falls, in varying stages of completion—Adams Nos. 1 and 2, the Schoellkopf Station, the Toronto Power plant, and the Ontario Power Generating Station. Both Adams plants were demolished in the early 1960s and the Schoellkopf Plant was destroyed by a spectacular collapse of the gorge bank above it in 1956. The buildings of the Ontario Power Generating Station and the Toronto Power Generation Station are extant on the Canadian side but all generating equipment has been removed and scrapped. The Rankine station is the only one left with all equipment intact albeit no longer serviceable. It is like the Lenin’s tomb of the birth of the electrical age. Although several reports have been prepared advocating the preservation of the Rankine Generating Station, its future remains uncertain.—Robert Barnett

The B&O Railroad Museum (tour site—1995 SIA Annual Conference, Baltimore) and the Railway Museum in Saitama City, Japan have announced a formal sisterhood agreement. A ceremony was held at the B&O Museum on Sept. 5. The affiliation will enable the museums to exchange collections, expertise, technology, personnel, education programs, and best practices, and to collaborate on international railway-heritage projects. In addition, a coordinated international marketing campaign will seek to draw railroad heritage travelers from across the world.—B&O RR Museum Press Release (Aug. 20, 2014)
Oliver Evans (Greater Philadelphia) held its annual meeting and picnic at the Fairmount Water Works Interpretive Center on Sept. 15. The featured speaker was historian Steven Ujifusa who spoke on the SS United States (see article elsewhere in this issue). On Oct. 19, the chapter was treated to a behind-the-scenes tour of the new Mitsubishi geothermal HVAC system at historic Strawberry Mansion in Philadelphia’s Fairmount Park. The mansion, built in 1789, recently re-opened after a 5-year restoration project that included replacing its 1930s radiators with a new heating and air-conditioning system that would be unobtrusive. On Nov. 17, Edward W. Duffy made a presentation on his new book, Philadelphia: A Railroad History, which details the accomplishments of the Pennsylvania RR, the Reading RR, the B&O RR, Baldwin Locomotive, and the Budd Co., among others. The book also offers insights into the formation of Conrail based on the personal experience of the author as the city’s liaison with the various rail reorganization agencies in the 1970s.

Roebling (Greater N.Y.-N.J.). On Oct. 4, chapter members toured the West Point Foundry Preserve, which reopened to the public in late 2013. Scenic Hudson Land Trust, the owner and caretaker of the preserve, along with assistance from the NY State Environmental Protection Fund, recently completed stabilization, interpretive signage and landscaping, and access improvements. Putting to use Michigan Tech’s several seasons of archeological and background research, the trust, working with Mathews Nielsen Landscape Architects, designed a number of full-scale interpretive elements to help visitors better appreciate the foundry site. The day-long tour also included a visit to the site of one of the Hudson Highland iron mines that supplied the foundry. On Oct. 18, the chapter held its Great Falls Symposium in Paterson, N.J. About 100 members and friends enjoyed a full slate of papers on regional IA topics. Scenic Hudson received this year’s John Augustus Roebling Award for outstanding contributions to industrial archeology. Chapter President Joe Macasek has continued to organize walking tours of IA sites in northern New Jersey. Over the past several months, Joe and his assistants have led tours to Chester Furnace, the Delaware & Raritan Canal, the Raritan Power Canal, and the Morris Canal Inclined Plane at Waterloo.

Southern New England toured M.M. Rhodes & Sons, Inc. in Taunton, Mass. on June 21. The company recently closed after more than 150 years in operation by the Rhodes family. Over the years it has manufactured a variety of small metal items (also see article in Sites & Structures). On June 30 the chapter toured the 1.2-billion-gallon-per-day Deer Island Sewage Treatment Plant in Boston. The facility has been a major part of the cleanup of Boston Harbor since it opened in 1995. On Sept. 12, the chapter toured Stony Creek Quarry in Branford, Conn. The site was established in 1887 by the Norcross Brothers construction company. Stony Creek granite is perhaps best known for its use in the pedestal for the Statue of Liberty. Today, it is still used for a variety of architectural, landscaping, and other applications. The chapter also held its annual business meeting on Nov. 1 at the Attleboro (Mass.) Area Industrial Museum. The area was once a leading jewelry manufacturing center.

Richard Greenwood (continued from page 13)

Rick would also want us to remember his accomplishments as a “dirt archeologist” in Rhode Island. His excavations for the Slater Mill Historic Site were instrumental in the re-creation of its 1820s waterpower system. He worked with heavy equipment to uncover the spectacular remains of the Forestdale Scythe Works. Almost alone, he dug up, recorded, and salvaged key features of the James DeWolf Distillery before new construction covered the site. Even when he did not get in the ground with a trowel, his oversight and advice improved the outcomes at dozens of state-authorized archeological projects.

You could always count on Rick Greenwood to identify, interpret, and (whenever possible) to protect our historic industrial landscapes.

Patrick Malone & Edward Connors
CALENDAR

2015


Jan. 23: OLIVER EVANS SIA CHAPTER ANNUAL DINNER, PHILADELPHIA, PA. Info: Reese Davis, reese-davis@verizon.net.

Mar. 7: NEW ENGLAND INDUSTRIAL ARCHEOLOGY CONFERENCE, WORCESTER, MASS. Sponsored by Southern New England Chapter SIA. See article and call for papers in this issue.


