



# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume 42

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Number 4

## LAST OF THE GIANTS Coal Breakers Threatened

**T**wo bits of distressing news recently came across the Pennsylvania industrial heritage front: the Huber and St. Nicholas, two of the last remaining anthracite coal breakers, were in the early stages of demolition. The Huber Breaker in Ashley, just outside of Wilkes-Barre, and the St. Nicholas Breaker in Mahanoy near the town of Shenandoah, were both significant steel structures built in the 1930s and were two of the largest breakers ever constructed to wash, break, and size large pieces of anthracite coal for market. Both now have a bleak future.

Anthracite is a hard coal, geologically older and much purer than bituminous and lignite. Globally, its largest fields are found in northeast Pennsylvania and it was mined and processed in significant quantities beginning in the mid-19th century. Initially an industrial fuel and claimed to be the first mass-produced and marketed, anthracite became primarily a home-heating fuel in the 20th century as home-furnace technologies evolved making the difficult-lighting but long and clean-burning coal desirable for

domestic consumption, while the generally less expensive coke took over the industrial market. Anthracite, due to its hardness and the particular geology of the region, was up to three times more expensive to bring to market than the much more prevalent bituminous. The anthracite mining industry began to see significant declines following major strikes that disrupted supply lines to the home-fuel market and the encroachment and later dominance of fuel oil and natural gas alternatives.

The multi-story breakers, linked directly to underground slopes or shafts, were the dominant feature on the anthracite landscape and were rivaled in size only by the vast culm or waste piles they created. They could be found clustered in urban environments but were also the centers of small, often scattered, mining communities called patch towns. Hundreds of breakers existed in Pennsylvania; employing thousands. The work inside was loud, dirty, and dangerous. Often a coal worker would start his career in the breaker at the age of 10 or 11 separating slate and other debris from coal before it was sized and

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Huber Breaker (left) with retail coal storage bins (right), 1991.

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J.E.B. Elliot. HAER PA, 40-ASH, 1-19

## LAST OF THE GIANTS *(continued from page 1)*

crushed. As he grew older, the worker would progress through the underground jobs of door boy, mule boy, then laborer and miner. When his body was too feeble or damaged to mine underground any longer, he would often find work back in the breaker picking slate until he could no longer do that.

The Huber and St. Nicholas breakers were two of the last and largest breakers built. Both were significant steel and glass structures designed to process anthracite from several linked collieries. The Huber Breaker, named for a company executive, began in the northern field in 1939 and ran until 1976. It ultimately closed when its operating company filed for bankruptcy because of declining demand. The site and structures were documented by HABS/HAER in 1991 and were ultimately purchased for a relatively small sum for their scrap value. The company hoping to capitalize on the scrap steel was open to selling the breaker to a heritage organization, but went bankrupt before anything transpired to save the structure. In Oct. 2013, Paselo Logistics from Philadelphia, a firm with ties to recycling companies, purchased the breaker, the 26 acres of land it sits on, and the site's coal reserves. While the ultimate fate of the breaker

has not been made public, early wide-ranging estimates suggest that the structures contain between \$85,000 and \$400,000 in scrap steel alone. Paselo Logistics must also contend with the costly environmental legacy of the site, and has indicated it will make donations of land and equipment to the Huber Breaker Preservation Society to further that group's work on a miners' memorial on the grounds.

The St. Nick, as it is known colloquially, opened in 1931 and operated until 1963 in the southern anthracite field. Named after an earlier breaker, which had begun work on Christmas Day 1861, the St. Nick was claimed to be the largest breaker in the world. The St. Nick, and the land it sits on, is currently owned by Reading Anthracite, a Pottsville, Pa. firm that continues to mine and process coal, much of it for the domestic heating (and pizza oven) market. In Sept. 2013, to the surprise of many in the area, a demolition company began taking down part of the loading areas of the historic breaker. Although a newspaper reporter uncovered a permit submitted a month prior to demolition, little was known until the work actually began. According to the Pa. Dept. of Environmental Protection, Reading Anthracite was removing sections of the breaker to mine the coal underneath. A brief windshield survey of the site in Nov. 2013 found that the main structure of the breaker remained intact and that strip mining appeared to be happening nearby.

While not formally documented, current photographs of St. Nick and the Huber can be found on several surreptitious urban and industrial exploration websites. More information on the Huber can be found in the HABS/HAER collection of the Library of Congress website ([www.loc.gov](http://www.loc.gov)).

While neither breaker has been fully demolished or diminished at the time of this writing, the loss of either or both will significantly compromise the last structural vestiges of the traditional economic base for the region. Adding to the loss of breakers, many of the vast culm piles have been "remediated" or are being used in co-generation plants for their remaining carbon content, leaving few full-scale reminders outside of several active strip mines, which are

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The *SIA Newsletter* is published quarterly by the Society for Industrial Archeology. It is sent to SIA members, who also receive the Society's journal, *IA*, published biannually. The SIA through its publications, conferences, tours, and projects encourages the study, interpretation, and preservation of historically significant industrial sites, structures, artifacts, and technology. By providing a forum for the discussion and exchange of information, the Society advances an awareness and appreciation of the value of preserving our industrial heritage. Annual membership: individual \$50; couple \$55; full-time student \$20; institutional \$50; contributing \$100; sustaining \$150; corporate \$500. For members outside of North America, add \$10 surface-mailing fee. Send check or money order payable in U.S. funds to the Society for Industrial Archeology to SIA-HQ, Dept. of Social Sciences, Michigan Technological University, 1400 Townsend Drive, Houghton, MI 49931-1295; (906) 487-1889; e-mail: [SIA@mtu.edu](mailto:SIA@mtu.edu); Website: [www.sia-web.org](http://www.sia-web.org).

Mailing date for Vol. 42, No. 4 (Fall 2013), Dec. 2013. ISSN 0160-1067. If you have not received an issue, apply to SIA-HQ (address above) for a replacement copy.

The *SIA Newsletter* welcomes material and correspondence from members, especially in the form of copy already digested and written! The usefulness and timeliness of the newsletter depends on you, the reader, as an important source of information and opinion.

**TO CONTACT THE EDITOR:** Patrick Harshbarger, Editor, *SIA Newsletter*, 305 Rodman Road, Wilmington, DE 19809; (302) 764-7464; e-mail: [phsianews@aol.com](mailto:phsianews@aol.com).



**St. Nicholas Breaker, 2013.**

# 43rd SIA Annual Conference

PORTLAND, MAINE • MAY 15–18, 2014

The SIA 2014 Annual Conference will head to northern New England and Portland for a look at the region's industrial heritage with a strong emphasis on maritime subjects. We expect to offer both an early bird Thursday and a Friday tour to the Bath Iron Works and the Maine Maritime Museum.

Established in 1884, the Bath Iron Works (BIW) is a "must-see" site that is currently actively building private, commercial, and military vessels, including advanced missile destroyers for the U.S. Navy. Since 1995, BIW has been a division of General Dynamics. Tour arrangements are still being confirmed, but we are looking forward to an opportunity to view a number of processes, including the Land Level Transfer Facility, a gigantic concrete platform that allows hulls to be moved horizontally onto a moveable dry dock.

The Maine Maritime Museum in Bath, located on the banks of the Kennebec River at the site of the Percy & Small Shipyard, is one of the nation's premiere maritime heritage sites. In addition to five original shipyard buildings, the museum features a range of permanent exhibits, including its popular lobstering exhibit and a floating waterfront exhibit aboard the



Ron Petrie

*The Bath Iron Works shipyard.*

*Sherman Zwicker*, a wooden Grand Banks fishing schooner built in 1942.

The hotel will be the Holiday Inn Portland—By the Bay. To reserve a preferential rate, call (207) 775-2311 or (800) 345-5050 and indicate Society for Industrial Archeology when making reservations.

The Saturday banquet will be a full lobster dinner (chicken as an alternative) on board a cruise ship touring

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largely inaccessible to the public. In addition to a number of underground mine tours, small museums and memorials that promote the heritage of the region, the State of Pennsylvania operates the Anthracite Heritage Museum in Scranton and Eckley Miners' Village outside of Hazleton. Eckley is a historic patch town that over time had several of its own working breakers and now preserves over 60 workers' houses, churches, a museum, support buildings, and over 100 outbuildings many dating to the mid-1850s. There is a replica breaker standing at Eckley, but it was constructed in 1968 as a prop in the shooting of *The Molly Maguires*, a labor-history film recounting the 1870s story of the trial and hanging of suspected militant miners. While the Eckley Breaker still stands, its condition is poor and hard-to-find preservation funding is difficult to justify for a relatively modern movie prop with so many other deserving historic resources on site.

*Bode Morin*



Gregory Anderson

*St. Nicholas Breaker, demolition in progress, 2013.*



## PORTLAND MAINE *(continued from page 3)*

the bay. The Friday night “filmfest” will take place in a public theater at One Longfellow Sq., and for the first time will be open to the general public with purchase of a ticket.

**CALL FOR ABSTRACTS.** The SIA invites proposals for presentations and poster displays for the Annual Meeting on Sat., May 17. 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 northern New England are particularly encouraged. All presentations and poster displays should offer interpretation and synthesis of data. Poster displays can be works in progress. Presentation sessions will be held at the conference hotel.

**Presentation Formats:** Proposals may be for individual presentations 20 min. in length, 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).

**Proposal Formats:** Proposals should be submitted electronically (Microsoft Word .doc or OpenOffice Open Document Format Text .odt) unless special arrangements are made. 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; 3) a brief biographical statement of 75 to 150 words for each presenter; 4) contact information including mailing address, telephone number, and email address for each presenter; and 5) a list of audio-visual requests. Please be aware that facili-

ties for media formats other than Microsoft PowerPoint .ppt or OpenOffice Open Document Format Presentation .odp may not be available.

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.

Presenters are encouraged to consider transforming their presentations into articles for *IA: The Journal of the Society for Industrial Archeology*. No conference proceedings are published, however, the SIA encourages recording of audio for free distribution by podcast. If interested in this option, please indicate interest in the proposal. The conference chair will provide further information on the necessary permissions from presenters and the SIA.

**The deadline for proposals is Jan. 31, 2014.** Send proposals or questions to: Justin M. Spivey, SIA Secretary, [secretary@siahq.org](mailto:secretary@siahq.org), 790 Old York Rd., East Windsor, NJ 08520, (609) 799-7799.

**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 Patrick Harshbarger, SIA Scholarships, 305 Rodman Rd., Wilmington, DE 19809; [phsianews@aol.co](mailto:phsianews@aol.co). **Deadline for applications is Mar. 31, 2014.** ■



Ron Petric

The “ghost” of schooner Wyoming is one of the attractions at the Maine Maritime Museum.

# IA in “The Forest City”

## 2013 SIA FALL TOUR REVIEW

Rockford, Ill., earned the moniker “Forest City” from the gorgeous elm trees found along its avenues and in its late-19th-century parks. The name might also have referred to the wood that was the raw material that fueled the industrial revolution in this Midwestern city. During the last quarter of the 19th century, no less than two dozen furniture manufacturers were operating in Rockford, many with a cooperative ownership structure dominated by Scandinavian immigrants. The mills clustered in the city’s Water Power District, fed by a canal from the Rock River. By the second quarter of the 20th century, Rockford was the second largest furniture-manufacturing center in the U.S. behind Grand Rapids, Mich. The city also developed an allied manufacturing base built around proficiency with machine tools, especially for the automobile parts, hardware, and packaging products industries. The furniture industry has practically vanished from Rockford, but the legacy of machine tools remains quite visible.

Over 50 SIA members converged on Rockford from Sept. 26-28 for the 2013 SIA Fall Tour with an opportunity to explore the city’s historic and active industries. The conference hotel was the Fairfield Inn, which offered a central location from which to launch bus forays to various parts of the city and beyond. The Fall Tour was organized along traditional lines with two full days of touring on Friday and Saturday with pre-tours on Thursday. The event concluded with a Sunday brunch in the spectacular Coronado Theatre. Thanks go to several stalwart SIA members who volunteered to report on the tours, as well as provide a selection of photographs, for this *SIAN* report.

**Thursday Pre-Tours. Midway Village Museum** provided an opportunity for SIA members to become acquainted with Rockford’s founding and early settlers, and its agricultural and industrial history. Many of Rockford’s industries

began along the Water Power District, and some are still in operation today, albeit in different forms after mergers and name changes. Museum exhibits cover furniture, machine tools, farm machinery, and knitting among others.

Situated just outside the museum, the village recreates a Victorian-era town with 26 buildings on 137 acres. Many of the buildings are historic, having been moved to the village from other locations; others are reproductions built to fulfill specific interpretive needs. Guides in period costume take visitors through the village, which was established in 1974. The village is also the site for numerous events, including the annual sock monkey festival (Nelson Knitting Mills of Rockford was the maker of the “red heel socks” that were used to make these toys).

The **Exelon Byron Generation Station** was one of the few opportunities SIA has had in recent years to tour a nuclear power plant. Commissioned in 1985 and 1987, the station’s two reactors are capable of producing 2,336 MW of electricity, enough to power more than two million residences. The SIA tour included a safety orientation from plant managers, as well as an invitation into the plant’s training center to see a mock-up of a control room where plant operators are drilled.

**Friday Tour 1** began north of Rockford across the state line in Beloit, Wis., another city with a strong industrial past, which is now exercising all its ingenuity to repurpose its many old industrial buildings. Outstanding among these are the former facilities of the **Beloit Corp.**, a world-class manufacturer of paper machines before going bankrupt in 1999. In its heyday, Beloit employed 6,500 workers, but now it has left behind over one million sq. ft. of industrial space. Perhaps the best-known modern-day inhabitant of the complex is **Fairbanks Morse**, which started out manufacturing windmills and then diversified into diesel engines and lo-

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Duncan Hay

All aboard at the Illinois Ry. Museum.



James Bouchard

Downsput forming machine at ACM Beloit.

James Bouchard



*A pile of discarded foundry patterns at the former Beloit factory.*

comotives. Today this plant employs about 500 people who manufacture and service diesel engines as a subsidiary of En-Pro industries (NB—Fairbanks Morse has a complex corporate lineage, and two other firms today manufacture pumps and engineered products under the Fairbanks and Fairbanks Morse trademarks). Tour participants were provided an opportunity to visit the shop floor, where most of the work is in the repair and overhaul of diesel engines.

Returning to Illinois, the bus next stopped at **Taylor Freezer** providing an opportunity to see the manufacture of soft-serve ice cream and frozen yogurt and drink equipment for the food-service industry. Taylor began in Buffalo, N.Y., in the 1920s when Charles Taylor developed a countertop ice cream maker. Today, a version of this machine is used to make everything from milkshakes to frozen cocktails in restaurants and shops all over the globe. Taylor eventually be-



Duncan Hay

*Barber-Colman factory.*

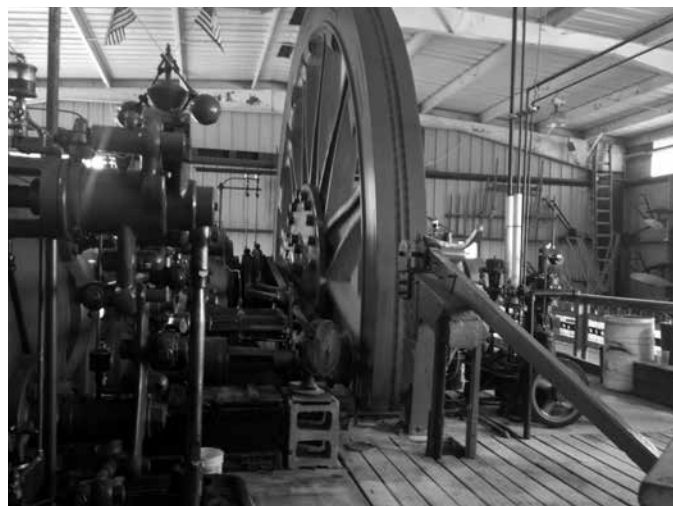
came a division of Carrier, with its headquarters and principal production facilities in Rockton, Ill., north of Rockford.

The lunch stop for both Friday tours was the beautiful **Tinker Swiss Cottage**. Its story begins with John H. Manny, who moved to Rockford in the early 1850s with his new bride, Mary Dorr Manny. He came up with an improved reaper and began manufacturing it only to be sued for patent infringement by Cyrus McCormick in 1855. Manny was represented by Abraham Lincoln and won the case, but unfortunately he died about two weeks later, leaving his wife with a fortune and a large business to run. Robert Tinker hired on as an accountant the following year. In 1862, he took a trip to Europe and fell in love with Swiss architecture. In 1865, he began building a “swiss cottage” on a limestone bluff across from the Manny mansion. Tinker also built a suspension bridge across Kent Creek to connect with Mary’s

James Bouchard



*Illinois Ry. Museum*



Saul Tannenbaum

*The Cooper Corliss engine at the Silver Creek Museum.*





John Reap

*Boring mill for artillery gun tubes at Bourn & Koch.*



*SIA group outside Garnhart's Oliver Museum.*

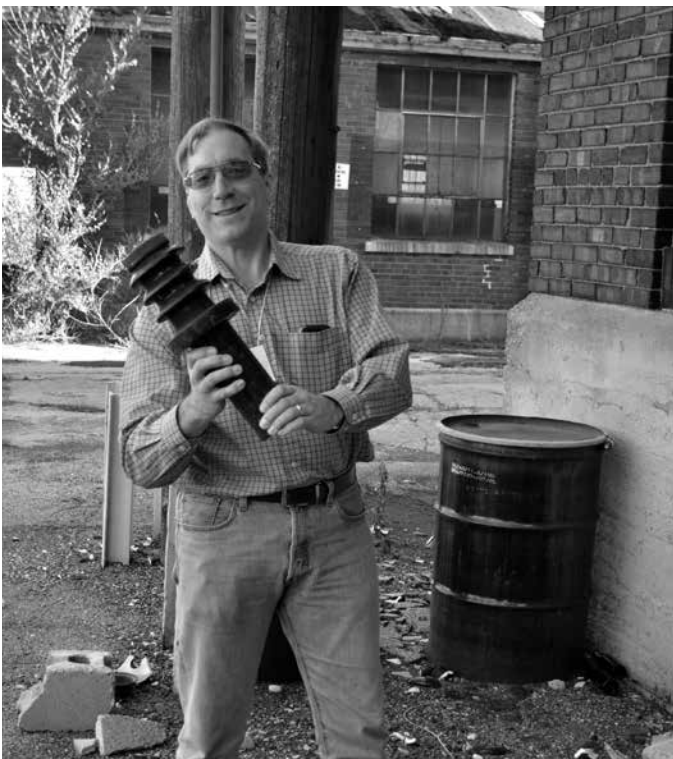
mansion, and in 1870 the accountant and heiress married. The Rockford park system took over the property in 1942 and opened it as a museum the following year.

Following lunch, the tour continued to **Eclipse Combustion** in Rockford. Eclipse manufactures gas and oil burners, heat exchangers, and other parts for fuel-gas piping and industrial combustion systems, and was founded in 1908 as Central Appliance Co. Among its early products was a deep fryer, which became standard equipment in the baking industry. From this the company branched out to develop

industrial burners and air/gas mixing systems. The third-generation family-owned company serves an international market and has developed a wide range of burners with ultra-low emissions to meet environmental standards. SIA participants toured the shop floor, which features modern computer-guided machine tools.

The final stop on this Friday tour was **Specialty Screw**, another firm that carries on Rockford's heritage in metal-working. Specialty Screw manufactures standard and metric fasteners, screws, and bolts to customer specifications. This

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Duncan Hay

*Tom Ferrell, who, along with his wife Uma, pulled together the 2014 SIA Fall Tour.*



John Reap

*Group photo outside the twin cooling towers of the Exelon Byron Generating Station.*



*A part of the Coronado Theater's pipe organ.*

is a modern facility using machine tools, presses, and heat-treating machines capable of creating hard-to-form shapes to close tolerances. Specialty Screw's products are "cold-formed" from metal rods. The SIA's tour included the shop floor, testing labs, and packaging departments.

**Friday Tour 2** took in the historic industrial core of downtown Rockford. The first stop was **Cellusuede Products Inc.**, which has been dyeing and chopping up natural and synthetic fibres into uniform bits that are applied to various substrates to make flocked wallpaper and greeting cards, battery stabilizers, automotive sound deadening, window gaskets, and plush interiors for more than 70 years. The SIA's day began in the company meeting room located in an old brewmaster's house, built in the 1920s. Company president David Honkamp provided an overview of the history of Cellusuede, which began in 1938 as a spinoff from a stationery company. He showed us some of the current applications for their product, including decorative boxes and team pennants. Flocking can deaden sound, act as a cushion, and provide a soft, attractive surface. The principal customer today is the automotive industry where flocking is used in win-

dow seals, pillars, console lining, and glove compartments. The process tour included the cutting and dyeing of fibers, followed by a finishing process involving the application of an electrostatic charge, through which the fibers are aligned to customers' specifications. Finally, the flocking is screened for any defects, such as clumps, before packaging.

Next up was the vacant **Barber-Colman** factory complex, now owned by the city, which is working to make it attractive for redevelopment through federal and state preservation tax credits. Barber-Colman was an important American textile machine maker, founded in 1894 by Howard Colman. Among his early inventions were improved machines for warp tying, spooling, and quilling. The SIA explored the buildings, mostly of reinforced-concrete "daylight" construction dating from the early decades of the 20th century. Broken glass and debris were all over, and there were other signs of vandalism. Barber-Colman's business declined with the loss of U.S. textile manufacturing in the middle decades of the 20th century. In 1984, the textile equipment business and the property were sold to Reed-Chatwood Inc. The complex was vacated in 2001 following continued financial losses.

**MEGAFAB** comprises three old-line manufacturers of metalworking machinery merged into one operation. W. A. Whitney makes plate punches, Bersch makes plate rolls, and Piranha makes multi-function cutting and punching stands for bar stock and angles. Of the three, Whitney is the one with Rockford origins (Bersch and Piranha were relocated from Kansas City). It was founded by machinist William A. Whitney, who began his inventing career in 1883 with a patent for a folding wheelbarrow. His biggest contribution from the point of view of railroad buffs was a ticket punch for train conductors. The W. A. Whitney Co. was formed in 1907 and focused on punches until 1918. Since the mid-1920s, the original plant and the Whitney brand name have survived through various owners, mergers, and

## **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 Jay McCauley, Grants Committee Chair, [mccauley3@sbcglobal.net](mailto:mccauley3@sbcglobal.net) or [www.sia-web.org/grants/about.html](http://www.sia-web.org/grants/about.html).



product lines. The SIA tour observed the assembly of some large Whitney machines that combine punching technology with plasma cutting of the outside edge of the end-user's product. MEGAFAB's building is located along the raceway of the Water Power District. On the lower level we saw a portion of the old race.

Why is the **Greenlee-Textron** logo a 'G' inside a square? It's because the Greenlee brothers, Robert and Ralph, came up with an automatic, hollow-chisel mortising machine in 1874 to make square holes for securing tenons. The brothers began in their father's factory in Titusville, Pa., by producing barrels and later barrel-making machinery for the oil business. In 1862, they moved to Chicago and profited from the Civil War demand for barrels to pack supplies. Many other inventions followed, including a self-contained milling factory for railroad ties that fit in a boxcar, a self-propelled tie-milling and spike-driving car, and a self-fed power rip saw. In 1897, when their factory in Chicago burned, they moved to Rockford where there was room to expand. Within 20 years they had diversified into making metalworking tools. In 1927, Greenlee Tool spun off and began making a line of metal punches and soon after hydraulic conduit benders. Textron acquired Greenlee Tool in 1956. Today the line is extensive, including sturdy toolboxes, test tools, electrical and plumbing tools, and garden clippers.

**Rocknel Fastener**, founded in 1989, is a subsidiary of Miera Corp., a Japanese fastener company. Most of its output is used by Honda North America (40 percent of the bolt content of a Honda made in North America comes from Rocknel), but they also ship to Mitsubishi, Subaru, and, beginning recently, to domestic companies. They make over 900 million pieces per year, including nuts, bolts, flange bolts, and SEM fasteners, which are bolts with washers. In addition to standard fasteners, they also produce fasteners with TORX™ drive heads and with MATHread™ threads. The Japanese influence was apparent in the fact that everyone on the floor was wearing a white short-sleeved jacket to show the importance of cleanliness. There was a large sign describing their S-based core principles centered on Self Discipline, surrounded by Sorting, Simplicity, Standardization, and Sweeping. Each operator is fully responsible for his



Suzanne Wray

*Linotype Machine at Midway Village.*

machine from setup to quality. Operators are monitored for time usage, to make sure that overall the company can meet its just-in-time delivery requirement. The tour included the production floor of the 251,800-sq.-ft. factory, where fasteners are machined and then sent through one of four continuous belt furnaces. After plating using custom finishes, the fasteners are sorted automatically to identify defects.

**Saturday Tour 1.** The first half of this Saturday tour provided another opportunity to visit the **Beloit Corp.** com-

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Saul Tannenbaum

*Inside the control room at Exelon Byron Generating Station. Saul Tannenbaum*

# CALL FOR NOMINATIONS

## SIA PRESIDENT, VICE PRESIDENT, DIRECTORS, NOMINATIONS COMMITTEE

### 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 2014, there will be several openings: President, Vice President, three on the Board of Directors, and one on the Nominations Committee. 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. 1, 2014**. If you have any questions or need additional information, please don't hesitate to contact **Tim Mancl**, Chair, SIA Nominations Committee, 71 David Brearly Ct., Princeton, NJ 08540; (302) 632-5254; [tjmancl@gmail.com](mailto:tjmancl@gmail.com).

### Positions Open in 2014:

**President** (2-year term). The President is the principal executive officer of the SIA and, subject to the control of the Board, in general supervises and controls all the business and affairs of the SIA and sees that all orders and resolutions of the Board are carried into effect. The President is a member of the Board and presides at all meetings of the members of the Board.

**Vice President** (2-year term). The Vice President is a member of the Board and in the absence or disability of the President performs the duties and exercises the authority of the President; and in general performs all duties as from time to time may be assigned by the President or the Board.

**Directors** (3-year term). Three 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.

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 [www.siahq.org](http://www.siahq.org). If you're unsure about the process or the obligation, please call or write Tim Mancl at the address above.

### SIA Officers and Directors

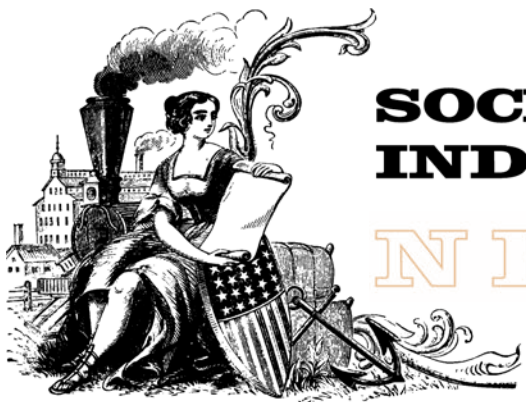
Duncan Hay, President (2012–2014)  
Amanda Gronhovd, Vice President (2012–2014)  
Jay McCauley, Past President (2012–2014)  
Justin Spivey, Secretary (2013–2016)  
Nanci K. Batchelor, Treasurer (2013–2016)  
Richard Anderson, Jr. (2013–2016)  
Gianfranco Archimede (2012–2015)  
Scott Baxter (2011–2014)  
Ann Dichter (2013–2016)  
Erin Timms (2012–2015)  
David A. Vago (2011–2014)  
Ingrid Wuebber (2011–2014)

### Nominations Committee

Tim Mancl, Chair (2011–2014)  
Susan Appel (2012–2015)  
Lynn Rakos (2013–2016)  
Jay McCauley, *ex officio* (2012–2014)

## HAVE YOU RENEWED YOUR SIA MEMBERSHIP?

Please remember to renew your SIA membership for 2014 if you have not done so already. Renewal notices were sent my e-mail and USPS in Nov. 2013. Please go online to renew if you wish to charge your dues/contributions to a credit card. Due to credit card security rules at Michigan Tech, SIA cannot process credit card numbers sent by mail. To renew online go to the SIA website at [www.siahq.org](http://www.siahq.org) and select the "Online Secure Payment" option. SIA dues cover the costs of our publications and the general operations of the SIA. Additional donations sustain SIA activities such as Student Travel Scholarships and the Industrial Heritage Preservation Grants. Thank you for your support!



# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

### PUBLICATIONS OF INTEREST

Vol. 42, No. 4

Fall 2013

COMPILED BY

Mary Habstritt, New York, N.Y., Justin Spivey, East Windsor, N.J., and Patrick Harshbarger, SIAN editor, Wilmington, Del.

#### GENERAL INTEREST

- ◆ Tony Barboza. **Trash Talk and the Real Dirt on a 'Toxic Tour' of Los Angeles.** *LA Times* (July 27, 2013). Highlights a growing trend of environmental activists offering tours to show the public the impact of industrial activities (present and past) on the lives of low-income communities. This free half-day bus tour of southeast L.A. illustrates the proximity of low-income housing to refineries, rail yards, and factories. Tours of both L.A. and Bay Area locations are offered by Communities for a Better Environment; see [www.cbecal.org](http://www.cbecal.org).
- ◆ Nigel Goose and Katrina Honeyman, eds. **Childhood and Child Labour in Industrial England.** Ashgate, 2013. 370 pp. \$134.95. The purpose of this collection is to bring together representative examples of recent scholarship exploring children as participants—even protagonists—in the process of industrialization, not simply as passive recipients or victims. Contributors address such crucial subjects as the varied experience of work, poverty and apprenticeship, institutional care, the political voice of children, child sexual abuse, and children and education.
- ◆ Simon Jenkins. **England's Best Views, Ironbridge Gorge.** *Country Life* (Aug. 5, 2013). The classic industrial landscape of Ironbridge Gorge, looking toward the Vale of the White Horse.
- ◆ Todd McLellan. **Things Come Apart: A Teardown Manual for Modern Living.** Thames & Hudson, 2013. 125 pp. \$29.95. Photographs capture 50 mechanical and electronic objects in a dismantled and meticulously arranged form that echoes exploded view drawings.

#### IRON & STEEL

- ◆ Mark Aspery. **The Skills of a Blacksmith, Vol. 3: Mastering the Fundamentals of Traditional Joinery.** Skip Jack Pr., 2013. 368 pp. \$59. Intended for intermediate to advanced blacksmiths, this book explains heel tenon, collar, square corner, punching, drifting, and tool-making techniques.
- ◆ John Murawski. **Restoration Work to Begin at Crumbling Civil War-Era Artifact.** *Raleigh (N.C.) News & Observer* (Dec. 23, 2012). The N.C. Dept. of Cultural Resources is embarking on a long-term project to stabilize and restore the stone stack of the Endor Iron Furnace in Lee County.
- ◆ Mark Reutter. **A Blue-Collar Future Proposed for Sparrows Point.** *Baltimore Brew* (May 3, 2013), [www.baltimorebrew.com](http://www.baltimorebrew.com). Baltimore County has outlined a plan for converting the closed Sparrows Point steel plant (SIAN, Winter 2013; tour site—SIA Annual Conferences 1975 and 1995) into a modern port facility for “super ships,” advanced manufacturing plants, wind-energy staging operations, and supply-chain

warehouses. The full redevelopment report is available at [www.baltimorecountymd.gov/business](http://www.baltimorecountymd.gov/business). Also, **City Granted Temporary Order Against Sewage Shutdown by Sparrows Point Owners** (Oct. 5, 2013). During the early 1940s, the City of Baltimore began diverting more than 200 million gallons of treated sewage water daily to Sparrow's Point, which the steel mill used as cooling water for various mill processes. Now that the plant is shut down, the city wishes to continue the arrangement but the new owners, who are dismantling the plant for scrap, are charging \$80,000 per month and placing limitations on the volume of sewage they are willing to accept.

- ◆ Keith Schneider. **Steel Leads Revival in Ohio River Valley.** *NY Times* (Sept. 5, 2012). The present-day manufacturing economy through the eyes of a tug's captain who is seeing less coal and more steel, rock, and concrete in his barges.

#### MACHINES & MACHINE TOOLS

- ◆ Jennifer Walkowski. **Roll Out the Barrels, the E. & B. Holmes Machinery Company.** *Western New York Heritage* (Fall 2012), pp. 8-17. History of Buffalo-based company that developed innovative machines for making wood barrels, among other products. The factory at 59 Chicago St. was listed on the National Register in 2009. Also, *Brayley & Pitts Watercolor Provides Rare Look at Early Industry* (p. 72), watercolor, dated 1865, of the Brayley & Pitts Co. (later Buffalo Pitts), showing its machine works, the Erie Canal, and the New York Central RR in Buffalo.

#### GLASS

- ◆ Emily Byrne Curtis. **Glass Exchange between Europe and China, 1550-1800: Diplomatic, Mercantile, and Technological Interactions.** Ashgate, 2009. 156 pp. \$99.95. Collection of essays describes episodes of the exchange of glassware and glassmaking technology among European (principally Venetian) and Chinese merchants and glassmakers. Rev: *T&C* (Apr. 2011), pp. 393-94.
- ◆ Norman L. Dean. **The Man Behind the Bottle, The Origin and History of the Classic Contour Coca-Cola Bottle as Told by the Son of its Creator.** Xlibris, 2010. 162 pp., illus. \$19.99. Earl R. Dean was a designer for the Root Glass Co. of Terre Haute, Ind., in 1915, when the Atlanta soft drink firm solicited designs for a distinctive bottle to distinguish its product from those of imitations. According to this account, the author's father made the mold into which glass was blown for the Root Co.'s winning entry in the contest. The patent was issued in the name of a different employee, while still another was also credited with the design. The Dean version is supported by



considerable evidence, including early drawings in the possession of the family, and even a production example of the prototype bottle. The book offers a picture of the craft influences at work in the early-20th-century glass container industry, in addition to lengthy discussions of the “iconic” bottle as a marketing tool. Of some interest is the fact that the Root family’s investments in Coca-Cola bottling operations proved highly lucrative, even as the glass container business was later sold to the giant Owens-Illinois.

## TEXTILES

- ◆ Marc N. Belanger [SIA]. **A Guide to Fall River’s Mills and Other Industrial Sites.** 2013. 85 pp., illus. \$26. Avail.: [www.lulu.com](http://www.lulu.com). A guide to the textile mills of Fall River, Mass., past and present. Prepared to mark the 200th anniversary of industrial development along the Quequechan River.
- ◆ Joe DePriest. **Day by Day, Loray Mill Building Coming Back to Life.** *Charlotte (N.C.) Observer* (Sept. 6, 2013) and C. J. Hughes. **A Historic Textile Mill Begins a New Chapter.** *NY Times* (May 8, 2013), p. B7. A \$39M project is underway to convert the 600,000-sq.-ft. brick textile mill in Gastonia, N.C. into offices and apartments. The Loray Mill is best known as the site of a bloody strike in 1929, marking the spread of labor unrest into the southern textile industry. The mill was purchased in the 1930s by Firestone’s textile division. The mill made fabric for tires and stayed in operation until 1993.
- ◆ Joseph DePriest. **Original Belmont Mill Building Emerges as Bricks Removed.** *Charlotte (N.C.) Observer* (Sept. 13, 2013). The 1902 Chronicle Mill, Belmont, N.C.’s first textile mill, was not thought to survive, but it remained at the core of a larger complex that had expanded around it over the years. The current owner is no “thinking about restoration” rather than complete demolition.
- ◆ Vera Haller. **Because the Doorman Doesn’t Iron.** *NY Times* (July 14, 2013), p. RE 1. Profile of the family-owned W. H. Christian & Sons in Brooklyn, which has been providing and

cleaning uniforms for doormen, security guards, and other building staff since 1924. It is estimated that on any given day, 100,000 workers in metropolitan New York are wearing uniforms provided by this company.

- ◆ Michael Haskey. **Eagle & Phenix Contractor Brasfield & Gorrie Receives Award for Textile Mill Project.** *Columbus (Ga.) Ledger* (Sept. 6, 2013). *Engineering News-Record* is awarding “best renovation and restoration project in the Southeast” to a condominium project at the Eagle & Phenix Mill No. 2, built in 1860.
- ◆ Cathy Horyn. **Dirty Old Factories.** *NY Times* (Aug. 15, 2013), p. E1. Story of the 100-year-old L.C. King Manufacturing Co. in Bristol, Tenn., said to be the oldest cut-and-sew factory operating in the U.S. under its founding family. The company made its reputation with workwear for agricultural workers and outdoorsmen but has been reinvigorated by contracts for jeans from fashion designers.
- ◆ Sarah S. Kilborne. **American Phoenix: The Remarkable Story of William Skinner, A Man Who Turned Disaster into Destiny.** Free Pr., 2012. 448 pp. Skinner, an English silk dyer, arrived in the U.S. in 1845, penniless, but he soon acquired work in a fledgling Massachusetts silk mill and quickly rose to prominence. In 1874, a flood destroyed Skinnerville when a dam broke. Undaunted, Skinner mounted a comeback, rebuilding his mill and workers’ village.
- ◆ Bruce Lowry. **In Silk City, the ‘History Wars’ Rage On.** *North Jersey* (July 26, 2013), [www.northjersey.com](http://www.northjersey.com). Editorial decries the half-hearted political commitments that have prevented Paterson, N.J., from living up to its potential as a heritage tourism destination. The latest episode involves a petty dispute between the mayor and the development corporation over repairs to the roof of the Paterson Museum, located in a former Rogers Locomotive shop building.

## AGRICULTURE & FOOD PROCESSING

- ◆ David W. Dunlap. **Relics of the Domino Sugar Refinery, Frozen in Time and Syrup.** *NY Times* (Oct. 24, 2013) p. A24. Update on re-development plans for what once was the world’s largest sugar refinery details what will be preserved, including the bulk unloading cranes (tour site—2002 SIA Annual Conference, Brooklyn).
- ◆ **In Urban Revival Beer Creates Small Business Hubs.** *NY Times* (July 4, 2013). Craft beer makers such as the Brooklyn Brewery, located in the former Hecla Ironworks in the Williamsburg section, often lead to neighborhood gentrification but are then priced out by rising real estate values. The article makes a case for protecting the urban manufacturers who have anchored redevelopment efforts.
- ◆ **The International Molinological Society (TIMS) E-News** includes an extensive round-up of news and notes from mills around the world. Info: [www.molinology.org](http://www.molinology.org).
- ◆ Chris Seward. **Raleigh’s Landmark Nehi Bottling Building Will Get Makeover.** *Raleigh (N.C.) News & Observer* (Sept. 19, 2013). The Moderne-style bottling plant was built in 1938. It is being rehabilitated for offices.
- ◆ Gordon M. Winder. **The American Reaper: Harvesting Networks and Technology, 1830-1910.** Ashgate, 2013. 278 pp., illus. \$119.95. Traces the international diffusion of the reaper through the patent licensing and sales efforts of International Harvester.

## ARMS & MUNITIONS

- ◆ Katherine Calos. **Arsenal Blast in 1863 Killed Dozens, Rocking Richmond.** *Richmond Times-Dispatch* (Mar. 4, 2013), p. 1. Lengthy article provides perspective on an explosion at

## CONTRIBUTORS TO THIS ISSUE

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*With Thanks.*

the Confederate munitions factory at Brown's Island on Mar. 13, 1863. Part of a series marking the Civil War's 150th anniversary.

- ◆ Karen Jones, Giacomo Macola, and David Welch, eds. **A Cultural History of Firearms in the Age of Empire**. Ashgate, 2013. 330 pp. \$134.95. The essays presented in this volume extend the study of the gun beyond the confines of military history and the examination of its impact on specific colonial encounters to a fuller cultural understanding of some of the most significant consequences of British and American imperial expansions.
- ◆ Denise Kiernan. **The Girls of Atomic City: The Untold Story of the Women Who Helped Win World War II**. Touchstone, 2013. 400 pp. \$27. Based on interviews with 10 women workers, this is a social history of the secret factories enriching uranium for weapons at Oak Ridge, Tenn.

## MISC. INDUSTRIES

- ◆ James Barron. **Notes of Sorrow in Changes at Steinway**. *NY Times* (July 12, 2013). Piano manufacturer Steinway & Sons (tour site—2002 SIA Annual Conference, Brooklyn) has been sold to a private equity firm that owns 15 other companies making everything from windshield wipers to sewing machines. Musicians are concerned that Steinway will be forced to alter its highly regarded manufacturing traditions.
- ◆ Miguel Hernandez. **Torcedores: Gotham's Hispanic Cigar Rollers at Work**. *New York History Blog* (Apr. 3, 2013), [www.newyorkhistoryblog.org](http://www.newyorkhistoryblog.org). In 1883, cigars were manufactured in 127 tenements in New York City, employing nearly 8,000 individuals. Descriptions of work conditions in Hispanic cigar workshops.
- ◆ Ian D. Rotherham. **Peat and Peat Cutting**. Shire Pub., 2011. 64 pp, illus. \$12.95. Yet another in the informative series of Shire Library books on aspects of craft and life in the British Isles, this little volume compiles material on the use and history of peat as a domestic fuel and sometime industrial fuel. Once widely used as a substitute for wood, it is harvested by cutting into blocks the size of large bricks. Extensive illustrations show the production of peat in numerous locales in the British Isles, and details of tools, cutting, stacking, transport, and storage. Industrial-scale production of peat-based chemicals and fuel gas is described and illustrated; even highly mechanized harvesting machinery was developed and employed before competition from other fuels restricted peat's use to isolated locales.
- ◆ Robert Shaw and Peter Szego, eds. **Inventing the American Guitar: The Pre-Civil War Innovations of C. F. Martin and His Contemporaries**. Hal Leonard Performing Arts Group, 2013. 308 pp. \$50. Explores Martin's evolution as a craftsman and entrepreneur with essays by prominent guitarists and writers. Martin is largely credited with the development of the American flat-top guitar. The C. F. Martin & Co. (tour site—2002 SIA Fall Tour, Lehigh Valley) is celebrating its 180th anniversary with this book and a year-long exhibit of guitars at the Metropolitan Museum of Art.

## MINES & MINING

- ◆ Diane Cole. **Alaska's Fallen Copper Kingdom**. *WSJ* (Sept. 17, 2013), p. D5. Preservation of the Kennecott Mines National Historic Monument.
- ◆ Colin Hennessy, Louis E. Hunsberger, Robert Downey, and Brock E. Barry. **New Perspectives on Military Engagements**. *Civil Engineering* (Sep. 2013), pp. 62-77. This trio of articles presents current geotechnical analyses of mining used in military strategy: the Battle of the Crater in Petersburg, Va., during the U.S. Civil War, trench warfare in France during WWI, and Japanese tunnels on Iwo Jima during WWII.

- ◆ Andrew E. Kramer. **A Russian City Named for Asbestos Can't Give Up Its Carcinogenic Livelihood**. *NY Times* (July 14, 2013) p. 16. Profile of Asbest, a one-industry town where citizens take for granted asbestos dust in every aspect of their lives because it is the only way to make a living there.

## WATER CONTROL & RECLAMATION

- ◆ Jeff L. Brown. **Supermodel: The Mississippi Basin in Miniature**. *Civil Engineering* (Oct. 2013), pp. 42-45. The U.S. Army Corps of Engineers' Mississippi Basin Model near Clinton, Miss., was used to study proposed flood control measures from 1935 until the 1970s. The 1:2,000-scale model initially covered only part of the river basin but was expanded to cover the entire basin using German POW labor between 1943 and 1946.
- ◆ David F. Martin and Margaret Bullock. **Austere Beauty, The Art of Z. Vanessa Helder**. Univ. of Wash. Pr., 2014. 128 pp., illus. \$24.95. A survey of the artist's work, the best known being a remarkable series of 22 watercolors documenting the construction of the Grand Coulee Dam.

## WATER TRANSPORT

- ◆ Bruce Cole. **The Sunken Treasures of the Arabia**. *WSJ* (Sept. 4, 2013). The *Arabia* was a steamboat that foundered on the Missouri River near Parkville, Kan., in 1856. Buried by silt, she was rediscovered by treasure hunters in 1987. A new museum recently opened in Kansas City, Mo., to display the amazing collection of artifacts, ranging from a paddlewheel and huge boilers to hundreds of everyday objects being carried to frontier settlements. Several IA connections including a carpentry shop, various armaments, and a sawmill and fixtures. Info: [www.1856.com](http://www.1856.com).
- ◆ David W. Dunlap. **Waterborne Workhorses Time Staten Island's Tides**. *NY Times* (July 31, 2013), p. A14. Profile of the Caddell Dry Dock and Repair Co., a 110-year-old, family-owned shipyard.

## RAILROADS

- ◆ **100 Years of Canadian Railway Recipes**. Exporail, the Canadian Ry. Museum, 2013. 200 pp., illus. \$39.99. Avail.: (450) 638-1522, ext. 221. All proceeds benefit the preservation of Canada's railway heritage. A collection of 90 recipes from three major Canadian railways: CN, Canadian Pacific, and VIA Rail Canada. Includes photographs of mouthwatering dishes, railroad artifacts, anecdotes from workers, and historic information on life aboard dining cars and in the kitchens. "A century of culinary expertise is highlighted to satisfy the most discriminating palate!"
- ◆ John W. Diers. **St. Paul Union Depot**. Univ. of Minnesota Pr., 2013. 304 pp., photos. \$39.95. History of the grand depot (tour site - 2013 SIA Annual Conference) that united passenger and mail services for nine railroads. Also, **Whither the Passenger Train? St. Paul Union Depot: Decline and Rebirth**. *Ramsey County History* (Summer 2013), pp. 12-23. Based on the recent book, analyzes the reasons for the demise of passenger service that led to near-abandonment of the Union Depot. Scant attention is given to the re-uses of the late 20th century or the projected rebirth as a multi-modal transit center.
- ◆ Joseph B. Raskin. **The Routes Not Taken: A Trip Through New York City's Unbuilt Subway System**. Fordham Univ. Pr., 2013. 336 p., illus. \$34.95. Looks at the subway system that might have been and what kept portions from being built or left unfinished. The dramatic stories include clashing political agendas, financial shortfalls, and community battles that resulted in many false starts and tunnels to nowhere.
- ◆ Robert L. Reid. **CSX 'Daylights' Pennsylvania Tunnel to Permit Stacked Loads**. *Civil Engineering* (Sep. 2013), pp. 18-20. As part

of its National Gateway project to open routes for double-stack container traffic, CSX daylighted the 130-year-old Pinkerton Tunnel near Somerset, Pa., converting it to an open cut.

- ◆ Ralf Roth and Henry Jacolin, eds. **Eastern European Railways in Transition: Nineteenth to Twenty-First Centuries.** Ashgate, 2013. 428 pp., \$134.95. By the beginning of the 20th century the great cities of the continent were linked by a complex and extensive rail network. Yet this high-point of interconnectivity was abruptly cutoff after 1945, as the Cold War built barriers between east and west. In this volume, scholars take a fresh look at this situation, and the ramifications it had for Europe. As well as addressing the parallel development of railways on either side of the Iron Curtain, the book looks at how transport links have been reconnected and reconfigured in the twenty years since the reunification of Europe.

## AUTOMOBILES & HIGHWAYS

- ◆ Steven Kurutz. **Life in the Ruins.** *NY Times* (Feb. 7, 2013), p. D1. Tale of a man who lives and works in one of the buildings of the former Packard automobile plant in Detroit (tour site—2005 SIA Fall Tour).
- ◆ Bill Vlasic. **100 Years Down the Line.** *NY Times* (Oct. 30, 2013), p. F1. How the assembly line developed by Henry Ford has been adapted to suit current needs of the auto industry. Includes comments from historian Bob Casey [SIA].

## AVIATION & AEROSPACE

- ◆ John Burgeson. **Historian: Smithsonian Aviation Curator Should Resign.** *AviationPros.com* (Aug. 19, 2013). John Brown, an aviation historian, has given new life to a long-standing controversy over whether Gustave Whitehead or the Wright brothers were the first to fly a heavier-than-air controllable airship. Whitehead supporters say that he achieved flight two years before the Wrights, lifting off on Aug. 14, 1901 in Fairfield, Conn. Brown persuaded *Jane's All the World's Aircraft* to list Whitehead over the Wrights and has demanded that Tom Crouch, the Smithsonian's senior aviation curator, resign his post.

## BUILDINGS & STRUCTURES

- ◆ Michael R. Adamson. **A Better Way to Build: A History of the Pankow Companies.** Purdue Univ. Pr., 2013. 460 pp. \$45. History of a major West Coast contractor, historically notable for playing a role in the development of slip-forming, pre- and post-tensioning, and pre-casting concrete construction methods since the 1960s. Founder was Charles Pankow, who was instrumental in the formation of the Design-Build Institute of America in 1992. Rev: *CHSA Newsletter* (July 2013).
- ◆ Melissa Eddy. **Uncertainty over a Palace of Parking.** *NY Times* (Aug. 19, 2013). The preservation of the Kant Garage in Berlin has become a tough sell to the German public. The 6-story garage, built in 1929, is considered a landmark of modernist architecture, including its revolutionary double-helix ramps. The building survived the Allied bombing of WWII, but now the owner wants to tear it down.
- ◆ Kristina Torres. **Georgia State's Kell Hall To Be Torn Down.** *Atlanta Journal-Constitution* (Oct. 2, 2013). Includes timeline of this remarkable building, which was constructed in 1925 as Atlanta's first parking garage. Known originally as the Ivy Street Garage, it was acquired in 1945 by the Atlanta Center Evening College and converted into an academic building. The ramps were viewed as an asset for veterans with disabilities returning from WWII.

## BRIDGES

- ◆ Ben Benton. **Bridge Friends Pledge to Continue Effort to Save B. B. Comer Span.** *Chattanooga Times* (Aug. 16, 2013). The 83-year-old, through-truss bridge over the Tennessee River east of Scottsboro, Ala., is scheduled for demolition as a new parallel bridge takes shape.
- ◆ Jeff L. Brown. **Still in Service: America's Enduring Stone Railroad Bridges.** *Civil Engineering* (Sep. 2013), pp. 48-51. These three early-19th-century bridges have been listed on the National Register of Historic Places and recognized as National Historic Civil Engineering Landmarks: the Carrollton and Thomas viaducts in Maryland and the Canton Viaduct in Massachusetts. All three continue to carry frequent rail traffic.
- ◆ Frank Griggs. **Piscataqua Bridge.** *Structure* (Aug. 2013), pp. 28-30. Continuing his exploration of late-18th-century timber bridge builder Timothy Palmer's work, Griggs describes the Piscataqua Bridge, a multi-span structure completed across Great Bay west of Portsmouth, N.H., in 1794. The longest span, 244 ft., included three arched chords and held the U.S. record until 1812. **The Permanent Bridge: America's First Covered Bridge.** *Structure* (Oct. 2013), pp. 39-41. While explaining that the name "Permanent Bridge" was intended to contrast the 1804-50 incarnation of Philadelphia's Market Street Bridge from an earlier floating bridge on the same site, Griggs attributes its 46-year lifespan to Timothy Palmer's advocacy for covering the timber trusses. Without the covering, it might have lasted only a decade.
- ◆ Alice Oviatt-Lawrence. **Engineering History: Gustav Lindenthal's New York City Hell Gate Bridge.** *Structure* (Oct. 2013), pp. 16-19. This article takes a detailed look at the technical details behind the NY Connecting RR link between Long Island and the Bronx, including design loads, geotechnical issues, materials testing, and the 1996 repainting in "Hell Gate Red" that "faded immediately," resulting in litigation.

## POWER GENERATION

- ◆ **Tide Mill Times** (Summer 2013), *www.tidemillinstitute.org*. Articles include plans for a permanent Tide Mill Institute building; tide mills in Brooklyn, N.Y.; a tide mill and open-pit mine in Brooksville, Me.; a photo gallery of tide mill dams; an update on the status of the Souther Mill in Quincy, Mass.; and the Perkins Grist Mill in Kennebunkport, Me.
- ◆ Frank Urquhart. **Dounreay Documents Set for Nuclear Archive.** *The Scotsman* (Aug. 19, 2013). Britain's new National Nuclear Archive is to be built close to Wick Airport, near the Dounreay experimental power complex, Britain's first fast-breeder reactor. Documents from Dounreay will be the first items stored in the archives.

## ABBREVIATIONS:

CHSA = Construction History Society of America  
WSJ = Wall Street Journal

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## **THE FOREST CITY** *(continued from page 9)*

plex, which is now being redeveloped by Hendricks Holdings. President Rick Austin and vice president Rick Glover gave us a tour of some of the companies now using parts of the old Beloit premises.

**American Aluminum Extrusion Co. (AAEC)** was founded in 2001 by Samuel Popa using equipment from an abandoned Japanese extrusion plant that was shipped to Beloit and assembled on the site. Aluminum billets are cut to length, then heated to 850-900°F in a furnace. The next step is a press that turns the billet into two continuous rods of hot metal about one inch in diameter. Impressive what one can do with a couple of dies and enough pressure. On the day of SIA's visit, they were manufacturing aluminum rods for bike-lock shackles. Other products include mounting brackets (e.g., for outboard motors) and trailer components. The extruded pieces are then cooled and washed with water and stretched on a table to straighten them. They may undergo various kinds of post-extrusion fabrication, including drilling and punching, anodizing, and heat-treating. One highlight of the visit was seeing the wide variety of dies used in their processes, stored on a rack in a side room. Each of these dies takes three to five weeks to manufacture from high-strength steel, and the plant uses as many as ten dies for a single product.

The resurrection of the Beloit site is largely due to Ken and Diane Hendricks of **ABC Supply**, an established and successful company selling roofing, siding, and similar products to contractors. Ken Hendricks started out as a roofer and founded ABC in 1982. His strong belief in repurposing existing industrial buildings led him to purchase the Beloit site in 1999. One inheritance from the paper-machine making days is several hundred wood patterns stored in overhead racks. You probably could still build a Beloit paper machine (if you wanted) from the patterns under the roof.

**American Construction Metals (ACM)** manufactures metal parts for roofing, most of which are sold to ABC. The parts are made of rolled, stamped, and bent aluminum. The ACM building was originally part of the Fairbanks Morse foundry, which made diesel-engine components. The old sawtooth factory roof was leaking and deteriorated, and after careful cost estimation of the options, was replaced by a set of trusses and a flat roof. This was a challenging project due to the size of the factory; the new trusses were delivered by helicopter because no available crane could span the structure. The old roof was encapsulated within the new roof and still can be seen from the inside. A highlight of the tour was a downspout machine, which includes a die for adding long parallel grooves in the outer wall. ACM is particularly proud of the wide color choice it offers (36 colors, with all fittings to match) and its prompt response to disaster situations. It has been known to set up an entire warehouse within weeks in a disaster area with all metal components needed for rebuilding.

The "Ironworks Complex" is the largest and most challenging area to redevelop on the Beloit property. Efforts are now underway to make the space more congenial to de-



Duncan Hay

*Flock cutting and screening at Cellusuede Products Co.*

velopment, including reconciling the multiple floor levels and converting one bay into a covered through street leading down to the river. Current occupants include an artist who creates large bronze sculptures on commission, including one of former President Ronald Reagan on his favorite horse, and whose studio we were able to visit briefly. We stopped for lunch at yet another repurposed building in the complex, the Beloit Inn, where a large collection of historic photographs is displayed, and then we headed on to our afternoon activity.

**The Illinois Ry. Museum** in Union was founded in 1935 and has steadily grown to become what is widely regarded as the largest railway museum in the U.S. Museum guides Nick Kallas and Ken Kosan met the SIA group at the 1851 depot and gave a quick orientation to the grounds and sheds housing the collection. They also made sure SIA members boarded two of the several train and streetcar rides that the museum operates: a Chicago Transit Commission (CTC) streetcar

*(continued on page 16)*

## THE FOREST CITY (continued from page 15)

with its “Cottage Grove” nameboard still displayed, and an interurban car that used to run in the vicinity of the museum.

Several historic buildings were moved to the museum, including a 1905-06 Spalding switching tower. The collection of locomotives and rolling stock is stored mainly in nine large sheds. The museum maintains a certain focus on Chicago and the Upper Midwest, but also includes artifacts from elsewhere in the U.S. Several business cars include one with carved wood decorations and another, slightly later, one that opted for inlay because George Pullman didn’t want the striking wood carvers to delay completion of the car. Other cars we saw included various combinations of passenger and baggage space, with eating facilities ranging from small cafés with Formica-topped tables to rolling five-star restaurants with the best in tablecloths, cutlery, and cuisine. The “accommodation car” had perhaps the most interesting backstory: it ran on the Chicago to New Orleans run, into the segregated U.S. South, and was arranged so that African-American customers could sleep through the night without having to change cars or trains.

**Saturday Tour 2.** The second of the Saturday tours began its day at **Bourn & Koch**, a manufacturer of machine tools, where SIAers watched a number of processes, including gear cutting and the final assembly of a horizontal hobbing machine, a vertical lathe, and a boring mill for artillery gun tubes. Larry Bourn and Lloyd Koch founded the company in 1975 as a small machine-tool shop specializing in remanufacturing and retrofitting. The company has since grown to become one of the better-known names in industrial machining, in part by acquisitions, including Rockford Machine Tool, Barber Colman Machine Tool Division, Reed Chatwood, Roto-Technology, Fellows, Jones & Lamson, and DeVlieg Bullard.

Next up was a visit to the **Lowe’s Regional Distribution Center**, one of the retailer’s 15 centers nationwide. This is a massive logistics warehouse, which allows Lowe’s to distribute

products via semi-trucks in an efficient and timely manner to its stores. Tour participants enjoyed lunch at the **Silver Creek Museum** in Freeport, Ill., while spending time admiring the museum’s two signature artifacts, a Cooper Corliss steam engine [Mt. Vernon, Ohio] that served the Matthiesen-Hegeler Zinc Co. from 1914 to 1965, and the Silver Creek & Stephenson RR’s Heisler geared locomotive, which was manufactured in 1912 and first owned by the Louise Lumber Co. of Hawkes, Miss. The final stop was **Garnhart’s Oliver Museum** in German Valley. There, the group was greeted by owner Rick Garnhart, an avid collector of Oliver and Hart-Parr farm tools and machinery, and, especially, models, toys, and advertising. This is reportedly the largest private collection in the Midwest, so it was rewarding to see the many model and toy engines and tractors.

**Sunday Tour and Brunch.** The 2013 Fall Tour was capped off by a lovely brunch in the **Coronado Performing Arts Center** in downtown Rockford. This 1920s atmospheric theater is one of the premier examples in the U.S., an elaborate palace of gilded Spanish and Italian styling, fitted out for live performances as well as movies. Restoration was completed in 2001, following a major fund-raising campaign. SIA members were treated to a behind-the-scenes tour, including everything from the sumptuous bathrooms to the pipe organ and some of the vintage equipment such as an old stage-lighting switch board.

The SIA sends its thanks to Tom Ferrell, Uma Ferrell, Laura Furman, and Pam Hein who were the volunteers spearheading the local arrangements for this year’s Fall Tour. They’ve proven once again that a small group with knowledge of local IA is key to a successful event. Our thanks also go out to all of the Rockford area manufacturers and sites that opened their doors to the SIA.

*With contributions from Diana Bouchard, James Bouchard, Duncan Hay, Jay McCauley, Sharon McCauley, John Reap, Saul Tannenbaum, and Suzanne Wray ■*



**Tinker Swiss Cottage.**

Duncan Hay



## SIA GENERAL TOOLS AWARD

### Call for Nominations

The General Tools Award, presented each year at the SIA Annual Business Meeting, is the highest honor the SIA can bestow. The award recognizes individuals who have given sustained, distinguished service to the cause of industrial archeology. SIA members are invited to submit nominations for the 2014 SIA General Tools Award for Distinguished Service to Industrial Archeology.

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 publications*; (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 other collective entities are not eligible.

The nomination, which should not exceed three double-spaced typed pages, should address the specific accomplishments that qualify the nominee for the award. Supplementary material (the candidate's resume, for example) may be appended. Nominations must also include complete contact information, including e-mail address and telephone number, for both the nominator and the nominee. Any SIA

member in good standing may submit a nomination.

**History.** The General Tools Award was established in 1992 through the generosity of Gerald Weinstein [SIA], chairman of the board of General Tools & Instruments Co., LLC of New York City, and 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 now-famous “Plumb Bob,” a product of General Tools—and a cash award.

Previous recipients of the award are: Emory Kemp (1993), Robert Vogel (1994), Edward Rutsch (1995), Patrick Malone (1996), Margot Gayle (1997), Helena Wright (1998), Vance Packard (1999), Eric DeLony (2000), Robert Merriam (2001), Charles Parrott (2002), Alex Barbour (2003), Charles Hyde (2004), Lance Metz (2005), Patrick Martin (2007), Christopher Andreae (2008), Carol Poh (2009), Robert Gordon (2010), Richard Anderson (2011), Jane Mork Gibson (2012) and Robert Frame (2013). No award was given in 2006.

**Deadline for Nominations.** Nominations must be received on or before April 1, 2014. They should be submitted to: Richard K. Anderson, Jr., Chair, General Tools Award Committee, 1334 Broad St. #170, Sumter, SC 29150-1984; or to [richardkandersonjr@gmail.com](mailto:richardkandersonjr@gmail.com). ■



*Brewery historian Susan Appel [SIA] sent in this photograph of the Peacock Brewery/ Rockford Brewing Co., which she was able to locate on a side trip following the SIA's 2013 Fall Tour of Rockford, Ill. The brewery is undergoing rehabilitation which will include lofts, offices, a restaurant, and, fittingly enough, a micro-brewery. Landmarks Illinois has been using the project to tout the benefits of a statewide preservation tax credit program. Currently, Illinois restricts state tax credits to five demonstration communities. The project also has taken advantage of federal preservation tax credits, a program that some believe Congressional Republicans have targeted for elimination.*



# Historic Tunnel Rescue Project

On Friday, July 19, 2013, preservation work began in the town of Orange, Conn., on a little-known but historically important site damaged by Tropical Storm Irene in 2011. After the storm, a cave-in was noticed just off Derby-Milford Rd. Town officials were contacted and after some investigation it was feared that a vaulted stone tunnel built to carry Davis Brook under the former New Haven & Derby RR embankment had collapsed.

The NH&D opened in 1871 spanning Davis Brook on a timber trestle. In 1883, the NH&D embarked on an improvement project by pouring earth, sand, and rock off the trestle until the entire 300-ft.-wide ravine had been filled, with the track laid atop a 50-ft.-tall embankment. To channel the brook under this earthen wall, it was necessary to build a 7-ft.-wide, 180-ft.-long, stone tunnel. It was not arrow-straight, but rather bent in two places to follow the course of the brook. The tunnel's eastern upstream portal is about five feet tall, but the western downstream portal rises to more than double that.

This ambitious engineering project was duly noted in the *New Haven Evening Register* on Nov. 12, 1883, when the paper spoke of "the high trestle over the deep ravine, known as Davis brook" as being almost finished, and in the report of the state railroad commissioners who said in early 1884 that "at Davis Brook... a long arch culvert and heavy bridge abutments have all been nearly completed." This section of the NH&D was in service until May 1941 when it was abandoned by its later owner, the New Haven RR, over the strenuous objections of local farmers and the S.D. Woodruff Seed Co.

The good news is that the tunnel's vaulted arch did not collapse after Irene despite the initial fears. In fact, the



*Bracing the interior of the Davis Brook tunnel for repairs in a view from the western portal.*

stone masonry of the barrel is in good condition, and the tunnel walls of dry-laid rubble stone are still doing their job of supporting the roof. What did happen is that the force of the water during the storm caused or enlarged a rupture that drew soil through the south tunnel wall, created the sinkhole, and ultimately threatened the integrity of the larger structure.

With research provided by Bob Belletzkic, a railroad historian and member of the Orange Historical Society, FEMA visited the site in Oct. 2011 and ultimately agreed to fund the preservation project. This included repairing the rupture and reinforcing the exterior with concrete, as well as uncovering the roof in sections and encasing it in a concrete shell

*(continued on page 19)*



*The 15-ft.-deep cave-in exposed metal rods that may have braced the timbers of a trestle that predated the tunnel.*



*Reinforcing bars being placed to strengthen the tunnel arch. Note the bend in the tunnel.*

## IA ON THE WEB

**1936 Automobile Assembly Line** (<http://www.wimp.com/carassembly>). This short video, from a film titled *Master Hands* produced by the Jam Handy organization, shows scenes from a Chevrolet production plant. The level of automation is astounding.

**David Sarnoff Library Digital Collection** (<http://digital.hagley.org>). The Sarnoff Collection at the Hagley Museum & Library traces the development of significant 20th-century technologies such as radio, television, and computer. A selection from the collection is now available online including RCA Lab newsletters (1943-86), *RCA Engineer* (1955-1974), RCA Annual Reports (1921-45), and RCA/Victor advertisements.

**From London to Brighton** (<http://devour.com/video/from-london-to-brighton>). Three side-by-side time-lapse films produced by the BBC dating to 1953, 1983 and 2013 reveal how the English railroad system has changed over the last 60 years.

**NY Botanical Garden** (<http://mertzdigital.nybg.org/landingpage/collection/p1512coll8>) has begun digitizing its holdings of about 56,000 nursery and seed catalogs.

**Pennsylvania Railroad Line History** (<http://digital.hagley.org/cdm/landingpage/collection/p16038coll2>). Hagley Museum & Library has digitized a rare volume, *The Pennsylvania Railroad Company: Corporate, Financial and Construction History of Lines Owned, Operated and Controlled to December 31, 1945* (1947). This four-volume text, of which only 100 copies were originally printed, was intended for use of man-

agement only and issued to specific corporate officers. Like many companies of its size, the PRR was an amalgamation of hundreds of smaller companies and this text was essential for understanding that complex history.

**Save the Willow Run Bomber Plant** (<http://savethebomberplant.org>). The Michigan Aerospace Foundation is leading a campaign to preserve a portion of the Ypsilanti bomber plant that manufactured B-24 Liberators during WWII. Ford Motor Co. led the construction effort, which included a major airport, a 5-million-sq.-ft. plant designed by Albert Kahn, and a workers' village for 15,000 workers, including the women who were known collectively as "Rosie the Riveter." Website features background history, video clips, and information on the preservation campaign. The foundation proposes to use the plant to house the Yankee Air Museum's collection of historic WWII-era aircraft.

"IA on the Web" is compiled from sites brought to the editor's attention by members, who are encouraged to submit their IA Web finds: [phsianews@aol.com](mailto:phsianews@aol.com). ■

## CONFERENCES & WORKSHOPS

The 9th Biennial Preserving the Historic Road Conference will be held in Savannah, Ga., Sept. 26-28, 2014. Preserving the Historic Road is the leading conference dedicated to the identification, preservation, and management of historic roads. Savannah's public squares, canopied by live oaks and Spanish moss, are a leisurely stroll from the conference hotel, the Embassy Suites Savannah. Beyond Savannah, tours will be offered of the historic Dixie Highway and the Atlantic Coastal Highway. The planning committee is seeking paper abstracts that showcase issues related to historic roads and road systems such as practical and successful examples of historic road inventories, safety innovations, preservation policy, transportation policy, pavement and materials science, highway maintenance, technical conservation methods, and risk analysis for historic roads; historic road structures and systems, roadside architecture, cultural landscapes, viewshed management, rural roads conservation and suburban sprawl issues; community advocacy, historic-road tourism development, interpretation, and road history; thematic interpretations of historic roads or of road culture as seen from alternate disciplines (American Studies, Cultural Geography, Native American Studies, etc.); and international examples of any of the topics presented above. Preference will be given to paper abstracts that identify success stories or lessons learned, and provide specific models/policies/programs/strategies that conference attendees may apply to historic roads. For details, see <http://historicroads.org>. ■

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## HISTORIC TUNNEL (continued from page 18)

that will direct dead load away from the 130-year-old structure. The work was completed from July to Sept. 2013 by Guerrero Construction and consulting engineers DeStefano & Chamberlain. Interestingly, the crew reported that they may have found the base of one of the trestle timbers in the ground alongside the tunnel.

The Town of Orange is to be commended for preserving this historic railroad structure, so that it can be appreciated by generations to come. There are plans to nominate the Davis Brook tunnel and embankment to the State Register of Historic Places, and this may be followed up by a series of plaques commemorating the NH&D. More on the NH&D can be found at the Tyler City Station website ([www.tylercitystation.info](http://www.tylercitystation.info)) and the OHS website ([www.orangehistory.org](http://www.orangehistory.org)).

Bob Belletzkic

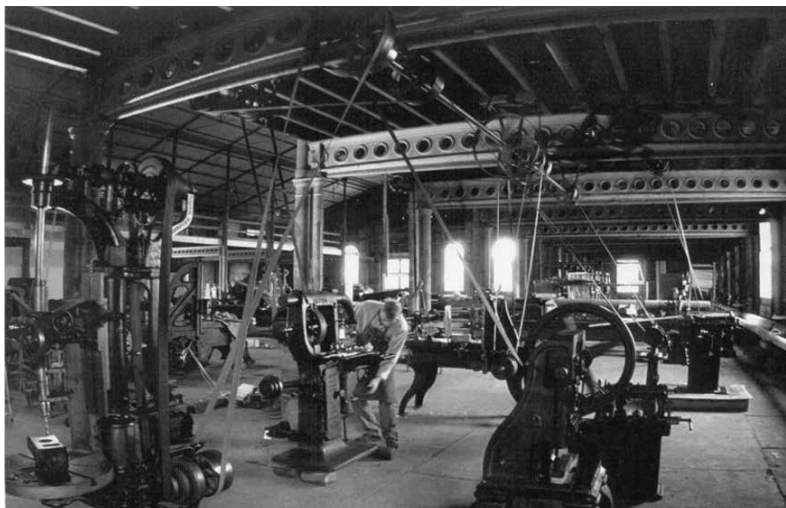


# Watervliet Arsenal Museum closes, expects to re-open with new focus

The Watervliet Arsenal Museum, located in a National Register-listed 1859 prefabricated cast-iron storehouse on the grounds of the arsenal in Watervliet, N.Y., closed Sept. 30. The museum opened in 1987 with collections covering the history of artillery and other heavy weapons, as well as displays of weapons and other items manufactured at the arsenal. In addition, the museum was home to an operating 19th-century belt-driven machine shop assembled by retired Arsenal master machinist Bob Rawls [SIA].

According to museum director and curator Bob Pfeil, the museum plans to re-open in two years. In the meantime its staff will work with the U.S. Army Center of Military History to refocus the collection on items made at the arsenal and on the work of the Benet Laboratories, a center for research, development, and engineering of heavy-weapons systems which is located at the arsenal.

Although best known as the principal site for the manufacture of large-caliber artillery tubes, including the 16-in. tubes used for shore batteries and World War II battleships, the arsenal did not start this line of business until 1887. It is expected that many artillery pieces on display from earlier dates may be transferred to the U.S. Army Artillery Museum at Fort Sill, Okla. However, local history groups and others are lobbying for some of the museum's treasures, such as a



New England Model Engineering Society

*The museum's machine shop.*

cannon captured from Burgoyne at the Battle of Saratoga and a rare example of a Confederate machine gun, to remain at the museum.

Prior to specializing in large-caliber artillery tubes, the arsenal produced a variety of products, including small arms and cannon ammunition; gun carriages and limbers; harnesses, saddles, and bridles; and leather cartridge bags and other leather accouterment.

The museum building measures 100 ft. by 196 ft., and is an outstanding example of early cast-iron prefabricated building technology. It was designed as a fireproof storehouse by Arsenal Commander Maj. Alfred Mordecai in collaboration with Daniel Badger, superintendent of the Architectural Iron Works in New York City. The panels were cast in New York and shipped on the Hudson River and Erie Canal to Watervliet, where they were unloaded and assembled (the canal ran right through the Arsenal property). The building was included in the first HAER survey, the Mohawk-Hudson, in 1969. Among other distinctions, it was placed on the National Register of Historic Places, made a National Historic Landmark in 1966, and declared a Historic Civil Engineering Landmark by the ASCE in 1983.

Steve Muller



HAER, 1969

*Watervliet Arsenal Museum.*

## IA EXHIBITS

**Industrial Sublime: Modernism and the Transformation of New York's Rivers, 1900-1940** is an exhibit at the Hudson River Museum, Yonkers, N.Y. through Jan. 17, 2014. With more than 60 landscape paintings, the exhibit explores a mode of landscape painting that focused more

on industrial and urban settings than natural ones. Artists include Robert Henri, John Sloan, Edward Hopper, Georgia O'Keeffe, George Ault, and Preston Dickinson. The exhibit will travel to the Norton Museum of Art, Palm Beach, Fla., Mar. 20-June 22, 2014. Info: [www.hrm.org](http://www.hrm.org). ■



## SITES & STRUCTURES

The National Trust for Historic Preservation has designated the **Pawtucket Dam** in Lowell National Historical Park, a National Treasure, one of only 33 sites recognized as endangered places of national significance. The Federal Energy Regulatory Commission issued an order in Apr. 2013 permitting the hydropower company that owns the dam to remove the character-defining wooden flashboard system (SIAN Spring 2013). —*Lowell Historic Board* (Aug. 2013)

An English archeological team has uncovered what is being described as **the oldest example of a standard-gauge railway** ever found. The wooden railway, dating to about 1801, was discovered while investigating a redevelopment site near the River Tyne. It was part of a network of wagonways that connected wharves with collieries in Tyneside and Northumberland. The site was being explored because it is near a Roman fort, but instead the archeologists stumbled across a 25-m stretch of wooden rails. The line is described as a heavy duty “main way” with two sets of rails laid on top of each other. News articles in *The Journal* (July 23, 2013) and the *Daily Mail* (July 26, 2013) include some excellent photos. Google search on “200-year-old railway discovered.”

**Red Mountain Park** in Birmingham, Ala., (tour site—1999 SIA Fall Tour; SIAN Summer 2009) has increased in size to over 600 acres with the addition of a 53-acre tract that includes the former **Raimund Mines**. Iron mines opened on Red Mountain in the years after the Civil War, contributing to the growth of Birmingham’s legendary iron and steel industry. The earliest and best known of the mines were the Woodward Iron Co. properties, which now form the core of Red Mountain Park. The Raimund Mines began production in 1896 under the ownership of the Pioneer Mining & Manufacturing Co., later becoming part of Republic Steel. The Raimund Mines closed in 1960.—*Al.com* (Sept. 12, 2013)

The historic **Walnut Street Bridge** in Chattanooga, Tenn. (tour site—2008 SIA Fall Tour) has been named one of the American Planning Association’s “10 Great Public Spaces” for 2013. Built in 1891, the pin-connected through-truss bridge was closed in the 1980s and on the brink of demolition when a local group began work to save the bridge. It reopened as a pedestrian bridge in 1993 serving as a spark for the downtown’s revitalization. The bridge has since become one of the city’s hallmarks.—*Chattanooga Times* (Oct. 9, 2013)

The **Delta Queen**, the famed river steamer built 1924-26, has languished at a dock in Chattanooga since 2009. Last Sept., it moved one step closer to returning to operation when the U.S. House of Representatives voted to exempt it from the 1966 Safety of Life at Seas Act for 15 years. This act bars vessels constructed of primarily flammable materials from carrying more than 50 passengers. The *Delta Queen* has a wood superstructure and a steel hull. She had been temporarily exempted from the act nine times between 1966 and 2008, but that year Congress failed to act on the exemption co-sponsored by then Senator Barack Obama in 2008. Now the bill must pass the Senate; if it does, this will open the door for new owners to purchase the steamer and begin restorations.—*www.save-the-delta-queen.org*

The Federal Emergency Management Agency (FEMA) has turned down an application from Schoharie County, N.Y., to build an accurate replica of the **Blenheim Covered Bridge**. The bridge, constructed in 1855 with a single span of 210 ft., laid claim to being the longest covered bridge in the world prior to being swept away in the flooding of Tropical Storm Irene in Aug. 2011 (SIAN, Fall 2011). According to a local news article, FEMA has offered funding for a “memorial pavilion” at the site of the original bridge.—*Albany Times-Union* (Aug. 10, 2013) ■



*The Kake Cannery was named to the National Trust for Historic Preservation’s 2013 List of America’s 11 Most Endangered Historic Places. Located in southeast Alaska, the cannery is a complex of wooden buildings situated on land held by the Village of Kake. Most residents are Kake People of the Tlingit Alaskan Native group, a federally recognized Native American tribe. The cannery played a key role in the development of the salmon-canning industry in the first half of the 20th century, and is considered particularly important in telling the story of a segregated multi-ethnic workforce and the role of organized labor in improving working conditions. The departure of the canning industry has left the Kake Cannery with an uncertain future. Two of the three cannery buildings recently collapsed due to high winds and heavy snow loads. The cannery complex is a National Historic Landmark, and the National Park Service is working with the tribe to develop a preservation plan.*

## Mark Finlay (1960–2013)

SIA member Mark Finlay died Oct. 6 in a single-car accident while driving home from a conference in Philadelphia. Mark's first major contribution to the SIA was to coordinate the Savannah conference in 1999. Among the events he organized was a Low Country Boil at the historic railroad shops complex of the Central of Georgia Ry., featuring the music of the Sea Island Singers. Mark served as a member of the SIA Board of Directors from 2006 to 2009. A frequent contributor to the book review section in *IA*, his most recent service to the Society was to serve in 2009 on the search committee for the new editor of *IA*.

Mark Russell Finlay was born Sept. 15, 1960, in Baltimore, Md. He graduated from Grinnell College in 1982 and earned M.A. (1988) and Ph.D. (1992) degrees from Iowa State University. The title of his dissertation was "Science, Practice and Politics: German Agricultural Experiment Stations in the Nineteenth Century." Mark accepted an appointment as Assistant Professor of History at Armstrong Atlantic State University in Savannah and moved there in 1992. He was promoted to Associate Professor in 1998 and to Professor



Mark Finlay (1960–2013)

in 2005. He established Armstrong Atlantic's Honors Program in 1996 and had served as Assistant Dean of the College since 2002. He had also won teaching awards at Armstrong Atlantic, and was beloved by his students.

Mark was a prolific scholar, publishing on topics ranging from German agriculture and the Ogeechee Canal to Thomas Edison and rubber in journals such as *IA*, *Agricultural History*, *Journal of Industrial Ecology*, *Annals of Iowa*, *Georgia Historical Quarterly*, *Bulletin of the History of Medicine*, *Canal History and Technology Proceedings*, and *Nevada Historical Society Quarterly*. His book, *Growing American Rubber: Strategic Plants and the Politics of National Security* (Rutgers, 2009), received the Theodore Saloutos Memorial Prize as

the best book published that year in the field of agricultural history. Since 2009, he had been book review editor for *Agricultural History*.

Mark Finlay is survived by his wife of twenty-six years, Kelly Applegate; two sons, Greyson and Ellis; his mother, Dee Ann Finlay, and his sister, Sharyn Finlay-Bitzer.

Fredric Quivik

## MEMBER NEWS

**William Howard Card**, a long-time SIA member, died on Aug. 13, 2013, at age 87 near his home in DeWitt, N.Y. Howard graduated from Syracuse University with a Ph.D. in electrical engineering in 1961 and joined the faculty the same year. He retired a full professor in 1993. Howard had a passion for early industry and even owned a waterpowered gristmill in Lewis County, N.Y., returning it to operating condition and using it to store his collection of woodworking machinery. After his retirement, he made wooden vise screws for old-style workbenches. In addition to SIA, Howard enjoyed participation in the Society for the Preservation of Old Mills and the Canal Society of New York. He is survived by his wife June, a son and daughter, and three grandchildren.—*Bottoming Out* (*Canal Society of New York State*).

**Charles K. Hyde** received the Historical Society of Michigan's Outstanding Lifetime Achievement Award at

its 2013 Annual Meeting. Charlie is the 7th recipient of the award, which was established in 2007. It recognizes "exceptional achievements in documenting and advancing Michigan history." Among the many *IA* topics covered by Charlie have been Michigan's automobile industry, historic bridges, and lighthouses.

**Jet Lowe** has retired after 35 years of documenting America's historic engineering and industrial resources for the Historic American Engineering Record (HAER). Tens of thousands of his large-format photos are now part of the HABS/HAER/HALS collection housed at the Library of Congress. Throughout his career, he contributed to numerous publications, including the SIA's newsletter and journal. His photographs were featured in a large-format book, *Industrial Eye* (1986). ■

## CHAPTER NEWS

**Oliver Evans** (Greater Philadelphia) members enjoyed a September walking tour of the Wayne Junction Historic District. The district, which covers some four city blocks, features a number of factory buildings and warehouses that grew around a north Philadelphia junction of the Reading RR. In October, the chapter was led on a tour of the Philadelphia Water Dept.'s Belmont Raw Water Pumping Station and Water Treatment Plant, built in 1901-02.

**Roebling** (Greater N.Y.-N.J.). Joe Macasek [SIA] has taken charge of leading chapter members on a number of driving and walking tours in northern N.J. over the past six months. Since July, tours have included the Delaware & Raritan Canal from Kingston to New Brunswick; Pequannock River forges including Clinton Furnace and Windham Forge; Butler, a company town that developed around the American Hard Rubber Co.; Pompton Lakes, site of the Ryerson forge, furnace, and boat dock on the Morris Canal; and the Edison Mine complex in Sparta, where Thomas Edison invested millions in a failed scheme to mine and concentrate low-grade iron ore. On Sept. 7, the chapter held its annual corn roast at Gerry Weinstein's Engineerium at Croton-on-Hudson, N.Y.

**Southern New England** held its fall tour on Oct. 19 in New Britain, Conn. Members visited the Connecticut Shotgun Mfg. Co. and the New Britain Industrial Museum, where the chapter also held its annual meeting.

**Support Your Local Chapter.** For info on a chapter near you or to start one, contact Ingrid Wuebber, SIA Director, Local Chapter Chair (Ingrid\_Wuebber@urscorp.com) or check out the local chapters section of the SIA website ([www.sia-web.org](http://www.sia-web.org)). ■

*Paul J. White holding the 2013 Vogel Prize plaque, a foundry pattern bearing his name. Paul received the award at the SIA's Annual Business Meeting in St. Paul, Minn., but was unable to attend in person due to being out of the country. The award recognized Paul for outstanding scholarship in "The Rise and Fall of the California Stamp: Historical and Archeological Perspectives on the Aging of a Technology," as published in IA: The Journal of the Society for Industrial Archeology, Vol. 36, No. 1, pp. 65-83. We thank Paul for sending in a photo proving he received the plaque!*

## NOTES & QUERIES

The SIA notes with sadness the passing of **Anna Held Audette** (1938-2013), a prominent late-20th-century American painter and teacher. Two of her distinctive industrial landscapes, *Crawler* and *Bigelow Factory*, were the subject of an IA in Art essay in *SIAN* (Winter 2003) by Betsy Fahlman. Audette's paintings are featured in a new book, *Ruins: Poems and Paintings of a Vanishing America* (Bunker Hill, 2013), co-authored with poet Suzanne Nothnagle.

**IA in Philately.** America's industrial workers are being recognized by the U.S. Postal Service with a new sheet of stamps titled *Made in America: Building a Nation*. The stamps feature black-and-white photographs, most by Lewis Hine and dating to the early decades of the 20th century. Each pane features a different man or woman at work. Pictured are a number of scenes from the construction of the Empire State Building, as well as individual workers performing jobs in various other settings including an aircraft engine plant, millinery shop, linotype shop, coal mine, powerhouse, textile mill, and railroad. ■





# **SOCIETY FOR INDUSTRIAL ARCHEOLOGY**

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## **CALENDAR**

### **2014**

**Jan. 8-12:** Society for Historical Archaeology Annual Conference, Quebec City, Que. Info: [www.sha.org](http://www.sha.org).

**Jan. 31:** CALL FOR ABSTRACTS DEADLINE FOR THE SIA ANNUAL CONFERENCE, PORTLAND 2014. See article in this issue.

**Feb. 1:** SIA CALL FOR NOMINATIONS DEADLINE. See article in this issue.

**Mar. 1:** SIA INDUSTRIAL HERITAGE PRESERVATION GRANT APPLICATION DEADLINE. See article in this issue.

**Mar. 3-4:** Iron & Steel Preservation Conference, Lansing, Mich. Paper sessions and hands-on workshops. Info: [meslerv@lcc.edu](mailto:meslerv@lcc.edu).

**Mar. 19-22:** National Council on Public History Annual Conference, Monterey, Calif. Info: [www.ncph.org](http://www.ncph.org).

**Apr. 1:** SIA GENERAL TOOLS AWARD NOMINATION DEADLINE. See article in this issue.

**Apr. 9-12:** Society for Commercial Archeology Annual Conference, St. Petersburg, Fla. Info: [www.sca-roadside.org](http://www.sca-roadside.org).

**Apr. 9-13:** Society of Architectural Historians Annual Conference, Austin, Tex. Info: [www.sah.org](http://www.sah.org).

**Apr. 11-12:** Construction History Society First National Conference, Cambridge, U.K. Info: [www.constructionhistory.co.uk](http://www.constructionhistory.co.uk).

**May 7-11:** Vernacular Architecture Forum Annual Conference, Galloway, N.J. Tours of South Jersey landscapes from Cape May to Salem. Info: [www.vernaculararchitectureforum.org](http://www.vernaculararchitectureforum.org).

**May 15-18:** SIA ANNUAL CONFERENCE, PORTLAND, ME. Presentation abstracts requested. See article in this issue. Info: [www.sia-web.org](http://www.sia-web.org).

**May 28-31:** Early American Industries Assn. Annual Meeting, Pittsburgh, Pa. Info: [www.earlyamericanindustries.org](http://www.earlyamericanindustries.org).

**June 2-7:** Assn. for Industrial Archaeology Spring Tour, Moravia and Silesia, Czech Republic. Info: [www.industrial-archaeology.org/aoverseas.htm](http://www.industrial-archaeology.org/aoverseas.htm).

**June 10-14:** National Ry. Historical Society Annual Convention, Springdale, Ark. Info: [www.nrhs.com](http://www.nrhs.com).

**June 11-15:** Mining History Assn. Annual Conference, Trinidad, Colo. Tours of the Raton Basin with a focus on Western coal mining. Info: [www.mininghistoryassociation.org](http://www.mininghistoryassociation.org).

**June 19-22:** First International Conference on Early Main Line Railways, Caernarfon, North Wales, U.K. Info: [www.earlymainlinerrailways.org.uk](http://www.earlymainlinerrailways.org.uk).

**July 5-8:** Railway & Locomotive Historical Society Annual Meeting, Ely, Nev. Info: [www.rlhs.org](http://www.rlhs.org).

**Sept. 5-10:** Assn. for Industrial Archaeology Annual Conference, Chester, U.K. Two days of paper sessions followed by visits to IA sites. Info: [www.industrial-archaeology.org/aconf.htm](http://www.industrial-archaeology.org/aconf.htm).

**Sept. 26-28:** Ninth Biennial Preserving the Historic Road Conference, Savannah, Ga. Paper proposals requested. See article in this issue. Deadline: Jan. 31. Info: <http://historicroads.org>.

**Oct. 5-8:** SIA FALL TOUR, SOUTHEASTERN INDIANA. Info: [www.sia-web.org](http://www.sia-web.org). [Note the Sun.-Wed. schedule to take advantage of process tours, many in Columbus, including Cummins diesel.] ■