The 1901 Electric Steel Elevator (ESE) in Minneapolis faces demolition if current preservation efforts fail to prevent it.

The ESE is nationally significant as one of the original all-steel grain elevators with free-standing, cylindrical, grain tanks and a steel workhouse or headhouse. It is the only survivor of three “classics of the steel era” identified by Reyner Banham in his 1986 study, *A Concrete Atlantis*. The others were the Electric Elevator in Buffalo, N.Y. (1897, razed 1984), and the Pioneer Steel Elevator in Minneapolis (1900, razed 1995; visited during the 1983 SIA Annual Conference).

At the turn of 20th century, elevator builders, especially in Minneapolis and Buffalo, were working to find a fireproof material to replace the all-wood terminal elevator. Steel, tile, and concrete were fireproof, but more expensive than wood. In Minneapolis, at least, the fireproof issue had more to do with insuring the grain in the elevator than with the elevator itself. Only a city-certified fireproof elevator could avoid costly insurance rates. The ESE was the only new elevator certified fireproof in Minneapolis in 1902.

Claude Allen Porter (C.A.P.) Turner, an engineer better known for his later innovations in reinforced concrete, designed the elevator to take advantage of fireproof steel construction. He approached the design holistically, working not only with a lighter, stronger, steel-tank design, but (continued on page 2)
also tackling additional thermal problems associated with grain storage in steel tanks. At Turner’s request, a young physicist at the University of Minnesota, Anthony Zeleny, invented the first remote-sensing thermometer to measure grain temperatures inside the tank, at 10-ft. vertical intervals, and display the reading in the engine house 350 ft. away in real time.

Over a century later, the same University of Minnesota has its eye on the elevator property, with the elevator closed since 2013. Seeing it as a nice location for a “sports bubble” for its nearby athletic facilities, the University offered to buy the site if the developer-owner would demolish the elevator. When the city Heritage Preservation Commission denied the demolition permit pending an intensive reuse study, the University bought the property outright. Using their exemption from city preservation ordinances, they would simply demolish it themselves, giving the property its highest and best use for a sports bubble, according to the University president.

As this SIAN goes to press, the fate of the elevator is uncertain. In October, the University Board of Regents voted for demolition. Meanwhile, a local Friends of the Electric Steel Elevator has formed to initiate legal action under the Minnesota Environmental Rights Act (MERA), which can halt or prevent demolition of a cultural resource. The elevator was determined eligible to the National Register of Historic Places in 2004, a significant fact in any legal action under MERA.

In a separate action, Amanda Gronhovd [SIA], the Minnesota State Archaeologist, sent a letter to the University raising questions about industrial archeological resources at the site prior to any demolition.

The SIA Great Northern Chapter advocates for ESE preservation and encourages support from SIA members. Contact Friends of the Electric Steel Elevator, Eric Amel, AIA, 612-979-7577; eric@msrdesign.com.

Bob Frame

Editor’s Note: SIAN will be following this story. Watch future issues for updates.

Electric Steel Elevator, Nov. 2016.

Electric Steel Elevator, interior.
Attention SIA Members!
This is your opportunity to help maintain the quality, strength, and diversity of leadership that has kept the SIA growing for more than four decades. We have four important positions to fill in the coming year, and you can help choose the next leaders of your organization.

Those elected 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 your society.

In 2017, there will be four (4) openings: three members of the Board of Directors, and one of the Nominations Committee. We need candidates willing to give their time, knowledge, and experience to the SIA.

This year’s Nominations Committee is asking you to identify candidates—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 Fri., Jan. 20, 2017. If you have any questions or need additional information, please don’t hesitate to contact Mary Habstritt, Chair, SIA Nominations Committee, 40 W. 77th St., #17B, New York, NY 10024; 917-709-5291; mhabstritt@verizon.net.

Positions Open in 2017:
Directors (3-year term). Three (3) of seven director positions are open this coming year. The Board meets approximately four times per year (both in person and online), including during the Annual Conference. Directors govern official business and affairs of the SIA and often chair committees.

Nominations Committee Member (3-year term). One (1) of three elected members who assist with recruiting and evaluating nominees and monitoring annual elections with the assistance of the past-president as an ex-officio member. It is expected that members will attend the Annual Conference to count ballots and that each member will chair the committee during the final year of the member’s term. The Chair announces the results of the election at the Annual Business Meeting during the Conference.

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 page at http://www.sia-web.org/. If you’re unsure about the process or the obligation, please call or write the Nominations Chair at the address above. Current officeholders and their terms are shown below for your reference.

SIA Officers
Maryellen Russo, President (2016–2018)
Christopher Marston, Vice President (2016–2018)
Amanda Gronhovd, Past President (2016–2018)
James Bouchard, Secretary (2016–2019)

Board of Directors
Saul Tannenbaum (2014–2017)
Paul White (2016–2019)
Susan Wray (2016–2019)

Nominations Committee
Mary Habstritt, Chair (2016–2017)
Bill Vermes (2015–2018)
Mike Raber (2016–2019)
Amanda Gronhovd, ex officio (2016–2018)

TICCIH Representative
Our upcoming 46th Annual Conference is shaping up to be a memorable event, the first ever SIA conference or tour to be held in the Lone Star state. Houston's industry is diverse, and this year's site tours will reflect the many influences that combine to make the city an amazing venue! SIA member T. Arron Kotlensky is serving as our local coordinator.

Process tours are being organized around the themes of Oil & Gas, the Houston Ship Channel, NASA's Johnson Space Center, Big Concrete, and Manufacturing & Fabrication. Below are some preliminary itineraries (subject to change).

Houston's industrial heritage is founded on the oil and gas industry, from drilling to refining. Visits to Oil & Gas sites will likely include a refinery tour, an active drilling site, a pipe fabricator, and a manufacturer of “high head” (high pressure) valve assemblies.

The Houston Ship Channel, opened in 1914, serves as the region's central maritime artery, with much of the nation's refining capacity lining its banks. The centerpiece of this tour will be a narrated cruise aboard the M/V Sam Houston. The tour will also include a visit to the Battleship Texas, BB-35, commissioned in 1914. Additional sites will likely focus on vessel construction and maintenance.

Houston took the official nickname of “Space City” in 1967 because of NASA's Johnson Space Center (JSC), located in Clear Lake, about half way between Houston and Galveston. A visit to the Space Center will include a combination of behind-the-scenes visits to astronaut training facilities, mission control center, and launch vehicle assemblies that are preserved on site.

A Big Concrete-themed tour may include a visit to the Astrodome; a subterranean freshwater cistern built in 1926; a local manufacturer of prestressed, precast concrete; and a visit to some of the bridges that span the ship channel.

A Manufacturing & Fabrication tour may include a visit to the main forging facility of Forge USA, a fabricator of large steel forgings, and an oilfield service tubing and fittings manufacturer, plus other tour sites to be determined.

Arron is looking for a volunteer willing to assist in arranging Sunday museum tours. Both Houston and Galveston are hosts to a number of IA-relevant museums. Galveston (continued on page 6)
Call for Paper Abstracts & Session Proposals • Deadline Feb. 17

The SIA invites proposals for presentations and poster displays at the 46th Annual Conference on Sat., May 20, 2017, in Houston. The conference hotel will be the Houston Marriott Medical Center, where presentation sessions will be held.

Presentations on all topics related to industrial archeology, technology, social change related to industry, and historic industrial structures and bridges are welcome. Papers about regional industries and transportation along the Texas Gulf Coast are particularly encouraged. Poster displays can be on works in progress. All presentations and poster displays should offer interpretation and synthesis of data.

Presentation Formats: Proposals may be for 20-minute individual presentations; a group of three or four presentations on a common theme filling a 90-minute session, or a 90-minute panel discussion (formal moderator optional, but encouraged). SIA will provide computers, data projectors, screens, microphones, and speakers as needed. Posters will be on display all day Saturday with a dedicated time for poster presenters to be present at their poster for discussion.

Proposal Formats: Proposals should be submitted online at www.sia-web.org/sia-46th-annual-conference/ unless special arrangements have been made. Each proposal must include:

1. The presentation title (indicate type: single paper, session proposal, or poster—on the submission form);
2. A 300-500 word abstract for the paper with detailed findings and conclusions;
3. Contact information including name, affiliation, email address, mailing address, and telephone number for each presenter;
4. A brief biographical statement of 75-150 words for each presenter;
5. The software (incl. version) used to create your presentation and any additional audio-visual requests beyond the standard equipment listed above.

Please be aware that facilities for presenting media formats other than Microsoft PowerPoint (.ppt/.pptx), OpenOffice Open Document Format Presentation (.odp), and Adobe Acrobat (.pdf) may not be available. In particular, please note on the form whether access to the Internet is crucial

(continued on page 23)

Student Travel Scholarships. The SIA awards travel scholarships to full-time students and professionals with fewer than three years of full-time experience. The scholarships help to offset some of the expenses of attending SIA events. To be eligible for a scholarship, the applicant must be a member in good standing and be willing to volunteer at the event for which they receive a scholarship (Annual Conference or Fall Tour). To apply for the 2017 Annual Conference in Houston, May 18-21, send a letter of interest demonstrating a commitment to IA and a letter of reference to Alicia Valentino, avalentino@esassoc.com. Deadline for applications is Mar. 18, 2017.
Following the retirement of Pat Martin from Michigan Tech, as well as the new 5-year contract having been signed to keep the SIA headquarters there, Steven A. Walton has been approved as SIA’s next Executive Secretary. Pat had served in this capacity for 18 years while also head of the Department of Social Sciences. Steve is an associate professor of history, recently tenured, and has been on the SIA Board for the last two years. His connection with SIA began in 1994 when the SIA conference was in Toronto and he was in graduate school at the University of Toronto. He helped the local coordinator organize sessions, stuff packets, and was the bus leader for the Hamilton tour. He also published one of his very first articles in IA (vol. 21 [1995]) after Terry Reynolds and Pat Martin converged on him at the reception after he gave a paper on the aesthetics of early reinforced-concrete bridges in Ontario.

His background is in mechanical engineering, in which he earned a bachelor’s and master’s degree, and in history and philosophy of science and technology, where he got another master’s and a doctorate. Although his research and writing interests are chronologically broad and cover both American and European topics, his work within the industrial-archeology realm include work on Pennsylvanian iron mining and processing and the history of antebellum ordnance manufacture (he was indirectly involved with Michigan Tech’s West Point Foundry project, though he was teaching at Penn State at the time). With colleagues at Michigan Tech, Steve is beginning a three-year project to write resource plans for the National Park Service for the newly-created Pullman National Monument in Chicago, which will be articulating the role of IA in guiding research, management, and interpretation of industrial production sites, planned communities, and the relations of labor to management in American manufacturing.

Further, in January 2017, Walton will take over from Fred Quivik as the editor of IA. Fred has served in that position since early 2011. In that time he brought the volume backlog down to just under a year, and hands off two more volumes in near-to-ready stages to Walton. Walton’s previous experience as an editor has been for the West Point Foundry special issue of IA (vol. 35.1/2 [2009 appearing in 2012]), as well as Instrumental in War: Science, Research, and Instruments Between Knowledge and the World (Brill, 2005); The Majestic Nature of the North: Thomas Kelah Wharton’s journals of 1832-34 and 1853 (with Michael J. Armstrong; SUNY/Excelsior Press, forthcoming); Wind & Water in the Middle Ages (ACMRS Press, 2006); and for parts of other collected volumes on early modern mathematical practitioners and engineers, and on metals in the Middle Ages. He looks forward to receiving submissions from SIA members and other researchers around the world.

Steven Walton, SIA’s new Executive Secretary and IA Editor. Mackinac Bridge in the background.

Annual Conference (continued from page 4)

includes the Ocean Star Offshore Drilling Rig Museum, Galveston Railroad Museum, and the tall ship Elissa. Museums in Houston include those dedicated to printing, bicycles, and firefighting. If you’re interested, contact Julie Blair at siaevents@siahq.org.

Our conference hotel is the Houston Marriott Medical Center, located approximately 5 miles southwest of downtown Houston. It is situated along the Houston Metro light-rail corridor, which provides regular service to the museum district and downtown area. For dining and refreshment, there are a number of nearby restaurants and bars in the Rice Village neighborhood, located west of the hotel adjacent to the Rice University campus.

The SIA is grateful to the following sponsoring companies and organizations for their support for the 2017 Annual Conference: Blanton & Associates, Inc., Gray & Pape, Mead & Hunt, and Texas Department of Transportation.

See you in Houston!

Julie Blair, SIA Events Coordinator
The SIA is pleased to announce Marni Blake Walter as our new newsletter editor. Marni brings a wealth of experience to the job, including six years as associate editor, then editor, of the American Journal of Archaeology, published by the Archaeological Institute of America (AIA). Marni has a B.A. degree in professional writing from Carnegie Mellon University and an M.A. and Ph.D. in archaeology and heritage management from Boston University. Her dissertation focused on the UNESCO World Heritage Convention and the challenges of managing archeological World Heritage sites when international and local demands conflict.

Marni grew up in Pittsburgh, just a few miles from the Mon Valley Steel Works, and various Westinghouse facilities—an area rich in industrial heritage. She’s recently been doing research on the development of the Westinghouse Atom Smasher at the firm’s laboratories in Forest Hills, and advocating for the labs’ preservation. Some may remember that she presented on this topic at our 2014 Annual Conference in Portland.

Marni currently works as a consulting archeologist, taking on fieldwork and historical research for a variety of resource management projects. She lives in Westmoreland, a small town in southwestern New Hampshire. Marni will take over the editorship from Patrick Harshbarger, who is retiring from the SIAN desk after 21 years. The Winter 2017 issue of SIAN will be Marni’s first. Please join us in welcoming Marni, and please keep the IA news flowing in her direction. She can be reached at sianeditor@siahq.org; 11 Esty Rd., Westmoreland, NH 03467; (617) 733-7083.

SIA Industrial Heritage Preservation Grants
Application Deadline: Mar. 1, 2017

The SIA offers Industrial Heritage Preservation Grants (IHPG) from $1000 to $3000 for the study, documentation, recordation, or preservation of significant historic industrial sites, structures, and objects. Funds may be used for a range of projects including, but not limited to: increasing public awareness of preservation efforts, photography, videography, preparing inventories, and developing measured drawings of extant significant industrial sites, structures, maritime facilities and industrial artifacts. Grant recipients must agree to prepare a written summary of their project suitable for publication in either the SIA Newsletter or for IA, the Society’s scholarly journal.

Grants are open to qualified individuals, independent scholars, nonprofit organizations and academic institutions. Organizations are preferred over individuals. Substantial participation from state, county, or local history organizations is encouraged, although such groups do not necessarily need to be a sponsoring agency.

For info on how to apply: www.sia-web.org/activities/preservation-grants/
The concept of the detachable shirt collar and cuff originated in Troy, N.Y., in 1827, but it took the introduction of the industrial sewing machine in the mid-19th century for Troy's collar and cuff industry to really take off. By the late-19th century the city's textile manufacturing companies accounted for more than 90% of all collars and cuffs made in the U.S. These mills were concentrated on River Street along the Hudson River north of the city's commercial center. In the culmination of an effort that stretches back more than four years, four significant River Street textile mills have been added to the National Register of Historic Places—the most recent in Feb. 2016.

Michael Lopez, program coordinator at local architecture and preservation firm TAP Inc., said that in 2012 the City of Troy received a grant from the Preservation League of New York State to prepare a Multiple Property Documentation Form (MPDF) for the River Street textile factory area. He explained that this National Park Service (NPS) methodology is used to document buildings that have similar functions and construction, with the goal of making later individual National Register nominations easier.

The city contracted with TAP for this project. “From everybody's point of view the corridor of factories starting at 444 River St. (Troy Waste Manufacturing Co.) to 701 River St. (Seale, Gardner & Company Cuff and Collar Factory) should be the focus of study,” Lopez said. The block south of the study area also features textile industry buildings, but it is located in an existing historic district.

TAP, in close consultation with the New York State Historic Preservation Office (NYSHPO), studied more than ten existing buildings in Troy. All of them (with one exception) related to textile manufacturing, particularly collars and cuffs. Another unifying theme is that most of the buildings are built of brick and share characteristics of the Romanesque Revival style. In addition, they exhibit the “fireproof” construction typical of late-19th-century factory buildings. So-called mill construction employed heavy timber supporting posts (generally 10 in. × 10 in.) and even larger beams (12 in. × 14 in.), so that the wood interior construction would char rather than burn through in case of fire. In addition, the timbers were designed to fall into the building rather than push out the exterior walls. The buildings also had multiple exits, gravity-operated fire doors, and sprinklers fed by elevated water tanks.

The MPDF was the best approach for documenting the buildings and spurring nominations, Lopez said, since the NYSHPO held that too many properties between the factories had been lost, thereby compromising the possibility of creating a new historic district.

Lopez pointed out that a successful National Register nomination allows developers to qualify for historic tax credits for up to 40% of the cost of rehabilitation. “[This] is quite substantial on a multi-million-dollar project,” Lopez said. Tax credits can be used by developers or “syndicated” to other investors. Tax credits can be received only for renovations done according to the U.S. Secretary of the Interior’s Standards for Rehabilitation, which promotes “sensitive” reuse, he added.

The four buildings that were successfully nominated for the National Register are:

- **Troy Waste Mfg. Co.** (444 River St.; nomination accepted Feb. 2014). This building was designed by Troy architects Marcus F. Cummings & Son and built in 1909 on a triangular lot. There were several additions to the original...
building. Troy Waste manufactured non-woven “shoddy” products from wool and cotton waste. The Marvin Neitzel Corp. later manufactured nurses’ uniforms there from 1974 until ca. 2005. The building is currently vacant. A project to convert the space into apartments has been approved, but construction has not begun.

**Wilbur, Campbell & Stephens Co.** (599 River St.; nomination accepted Feb. 2016). The largest and most architecturally distinctive of the listed buildings, this factory was built ca. 1889. The company dissolved ca. 1911. Afterwards the building was occupied by other textile firms until the mid-1960s. Most recently it was used as a furniture showroom and warehouse. It currently is being converted to apartments.

**Van Zandt, Jacobs & Co.** (621 River St.; nomination accepted Feb. 2014). Designed in the Romanesque Revival style by architects Marcus F. Cummings & Son and constructed ca. 1895. After sitting largely vacant for a number of years, this building was recently renovated as “Arthaus Hudson.” The apartments are aimed at artists, and the building features studio and gallery space.

**Searle, Gardner & Company Cuff & Collar Factory** (701 River St.; nomination accepted Jan. 2014). Built ca. 1889 and occupied by the company for 17 years. The building has been vacant for about 20 years. Prospects for future use are uncertain.

Two textile buildings in the River Street corridor had been previously renovated into offices by Troy developer John Hedley without the benefit of National Register listing or tax credits. The Cluett, Peabody & Co. building is the largest building in the corridor and the only one constructed of reinforced concrete. It was finished in 1917 and was considered an advanced building for its time. The architects were Westinghouse, Church, Kerr & Co. Its style is simpler than the other factories, and it has larger windows. In addition to being the last textile building constructed in Troy, it also was the one used the longest for textile manufacturing. Cluett, Peabody manufactured their “Arrow” brand collars and cuffs, and later shirts, there until the 1980s. Among the building’s current tenants is Troy City Hall. Hedley also converted the **Miller, Hall & Hartwell Co.** building to offices.

An anomaly in the textile factory corridor is **William Connors Paint Mfg. Co.** Besides being in a different indus-

(continued on page 10)
We need nominations for the 2017 General Tools Award (GTA). Give this committee some work to do, reviewing nominations for Distinctive Service to Industrial Archeology. Any SIA member in good standing may make a nomination.

Remember, the General Tools Award is the highest honor the SIA can bestow. It recognizes individuals who have given sustained, distinguished service to the field of industrial archeology. The award is presented at the SIA’s annual business meeting.

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

Think of a name, then start a nomination. This committee can help you finish. You can write a statement of 2-3 pages identifying the qualifying accomplishments. Or, write a partial nomination describing one sector of the person’s work you know best, with suggestions of others who might know more about the candidate’s career. Nominations also can be collaborative efforts submitted by two or three members.

Supplementary material (the candidate’s resume, for example) may be added. Nominations must also include the name, address, phone, and email of the nominator.

Examples of successful nominations appear on the SIA website for many of the members who have received the award to date: www.sia-web.org/activities/awards/general-tools-award.


The General Tools Award was established in 1992 through the generosity of Gerald Weinstein [SIA], then chairman of the board of General Tools & Instruments Co. LLC. The award is funded by the Abraham and Lillian Rosenberg Foundation. The Rosenbergs founded General Hardware, the predecessor to General Tools. The award consists of a citation, a commissioned sculpture (“The Plumb Bob”), and a cash award.

Please send your nominations by Mar. 1, 2017 to Bob Frame, Chair, General Tools Award Committee, Mead & Hunt, 7900 West 78th St., Ste. 370, Minneapolis, MN 55439. Or, email bob.frame@meadhunt.com. Or call Bob’s cell: (763) 370-1803 to talk about it.
PUBLICATIONS OF INTEREST

Mary Habstritt, New York, NY., and Patrick Harshbarger, SIAN editor, Wilmington, Del.

GENERAL INTEREST


◆ Engineering Heritage Australia, Vol. 2, No. 3 (July 2016) includes Owen Peake, Jindalee—Australia Sees Far Beyond Its Shores (three radar stations provide Australia with beyond-the-horizon detection); Margaret Doring, Woolloomooloo Finger Wharf (extensive history and operations of wharf in Sydney since the 1880s); Owen Peake, The Lake Goldsmith Steam Preservation Association (bi-annual steam rally); and round-up of other engineering heritage news from Down Under. Avail: www.engineeraustralia.org.au/engineering-heritage-australia/activities-publications.

◆ IA News, No. 177 (Summer 2016) includes Tony Crosby, Lancashire Museums—a Temporary Reprieve (cuts in local government budgets threaten closure of the Queen Street Mill near Burnley and the Helmsheath Mills Textile Museum); John McGuiness, Daniel Gooch—Savior of the Great Western Railway (the first locomotive superintendent of the GWR); Bill Pickering, The 1929 North East Coast Exhibition of Industry, Science and Art (held in Newcastle); and Robert Carr, The Wills Cigarette Factory (located in Bristol, established ca. 1861).

◆ IA News, No. 178 (Autumn 2016) includes briefs by Nigel Grizzard, AIA Spring Tour Romania, 16-22 May 2016 (highlights of the Assn. for Industrial Archaeology (U.K.) tour); Sarah Walters, Asbestos Dangers (advice on preserving buildings and artifacts that contain asbestos); Belem Oviedo Gámez, From Cornwall to Mexico Technology Transfer (English Company of Adventurers in the Mines at the silver mines of Real del Monte from 1825 to 1900); Robert Carr, Battersea Waterworks Pumping Station (demolition of pumping station); Rosemary Hughesdon, Prehistoric Salt Mining in Austria; Robert Carr, Woodbury Wetlands (water-supply reservoir in North London can trace its lineage to an aqueduct constructed in 1613. It has recently been opened to the public as a nature reserve).


◆ TICCIH Bulletin, No. 74 (4th Qtr. 2016) includes Timothy J. Scarlett [SIA], Michigan Technological University’s Updated Industrial Heritage and Archaeology Program (growth of program and new faculty); Judith Fait, Corrosion Alarm—Know Your Enemy! (tips on fighting rust with iron structures and artifacts based on experience at the Tsumeb lead and copper mine in Namibia); Ronaldo Andre Rodrigues da Silva, Joao Cura D’Ars de Figueiredeo, Jr., and Valquiria de Oliveira Silva, Conservation of an Iron Road Roller (1920s roller at the Federal Univ. of Minas Gerais, Brazil); Stephen Hughes, Early Steam Engines and Locomotives: A Global Exchange? (appeal for the exchange of data and development of scholarly questions for an international understanding of the spread of early steam technology); Belem Oviedo Gámez and Marco A. Hernandez, The Saxon Steam Engine of La Dificultad Mine (German engine imported to Mexico in 1887); Joaquin de Santos Barbosa, Steam Plant Restoration at the Wielemans-Ceuppens Brewery (machines of 1894 and 1905 for a powerful refrigeration system for a large-scale brewer of pilsner in Belgium); Boriana Vrusho, The Lac Superphosphate Factory (Albanian phosphate complex of 1966, developed under Soviet-style 5-year plan); Guenter Dinhobi, The Linz Railway Bridge—Demolished! (in Austria, attempts to preserve the lattice-girder bridge of 1897-1900 fail); and Patrick Viane, New Life for the Zollern Colliery Machine Hall (one of the finest examples of industrial architecture in the Ruhr region is fully restored as a museum).

TEXTILES

◆ Historical New Hampshire, Vol. 69, No. 3 (Fall 2016) is a themed issue on Resilience, Rebirth, and Redemption: Stories of Manchester. Articles by Matthew Labbe, The Center before the City: Early Manchester through the Lens of the
**Iron & Steel**


- **Maya Wei-Haas.** *The Story of the Weber Grill Begins with a Buoy*. Smithsonian.com (Sept. 2, 2016). The grill traces its roots back to Weber Bros. Metal Works, founded in Chicago in 1887, which manufactured a range of metal products, from hinges to wagons. In the 1950s a company salesman, fed up with his own attempts to cook with open grills, adapted the half spheres of buoys then being produced for the U.S. Coast Guard and the Chicago Yacht Club, to create the prototype of the now-famous closed grill.

**Mines & Mining**


- **Larry Godwin.** *Silver Lake Basin*. MHJ, Vol. 23 (2016), pp. 59-88. Silver Lake is four miles southeast of Silverton, Colo. Describes prospecting and mining from the 1870s onward.

- **Keith Haddock.** *British Opencast Coal: A Photographic History, 1942-1985*. Old Pond Publishing, 2015. 244 pp., illus. £29.95. Illustrated history of surface mining methods, documenting the types of earthmoving machines and the evolution of the industry. More than 300 photographs, many taken by the National Coal Board, along with newspaper clippings, advertisements, and manufacturers’ brochures.

- **L. Michael Kaas.** *The History of Zinc Mining in Friedensville, Pennsylvania*. MHJ, Vol. 23 (2016), pp. 17-42. From 1853 to 1893, Friedensville was an important center of zinc mining and refining. Includes descriptions of individual mines, water pumping, and ore processing.


- **Erich Obermayr and Robert McQueen [SIA].** *Historical Archaeology in the Cortez Mining District: Under the Nevada Giant*. Univ. of Nevada Pr., 2016. 224 pp. $39.95. Archeological excavations for an open-pit mine revealed a wealth of information on various workers and their families, ca. 1865-1940. Mining, charcoal making, brick and lime manufacturing, blacksmithing, and blackfiring are all discussed.

**Water Transport**

- **James Barron.** *As Flagship Returns, South Street Museum Aims to Right Its Course*. NYT (Sept. 22, 2016). The return of the 131-yr.-old, 3-masted sailing ship Wavertree after a 16-month, $13 million restoration is noted, as is the seaport museum’s slow recovery from financial difficulties and physical damage from Hurricane Sandy.

- **Mackenzie Dawson.** *How an FDNY Boat That Rescued 9/11 Survivors Lives On*. NY Post (Oct. 23, 2016). Edward Taylor purchased at auction the 129-ft. John D. McKeen, a fireboat that served New York City from 1954 to 2010. Taylor is restoring the boat and will dock it next to a restaurant, Hudson Farm & the Fish, which he plans to open in Sleepy Hollow, N.Y.

- **Tyler J. Kelly.** *A Mail Boat Stays Afloat*. NYT (Aug. 20, 2016). The 45-ft. J.W. Westcott II, based out of Detroit, has been delivering mail to Great Lakes freighters since 1948. It is the only floating ZIP code in the U.S.


- **Jesse Pesta.** *The S.S. United States Won’t Take to the Seas Again After All*. NYT (Aug. 5, 2016). The on-going saga of preserving the ocean liner took another turn when the Crystal Cruise luxury travel company decided after an outlay of $1 million that the obstacles to returning the ship to oceangoing service were too great. The S.S. United States remains at dock in Philadelphia while the conservancy that owns the ship seeks another solution (SIAN Fall 2014).

- **Dan Scanlan.** *Historic Jacksonville Shipwreck Could Have Been Impacted by Phone Cables Laid Years Ago, Archaeologist Says*. Florida Times Union (Aug. 29, 2016). The Union steamship Maple Leaf sunk in Apr. 1864 and was documented by underwater archeologists in the late 1980s, subsequently being named a National Historic Landmark. Cables approved by the U.S. Army Corps of Engineers in 2013 may have damaged the wreck, sparking a preservation controversy.

**Railroads**

◆ Ron Pearson. Powder Houses along the East Broad Top. TT, Vol. 28, No. 3 (Fall 2016), pp. 5-9. Background on seven small, thick-walled powder houses used to store explosives used in the coal mines served by the EBT RR. Photos and sketches.

◆ Tiffany Reynolds. Streetcar Rails Uncovered in Hogan Creek Bridge Replacement Project. Florida Times Union (Aug. 26, 2016). A section of Florida’s oldest electric streetcar railway may have been found embedded in the concrete deck of a bridge in Jacksonville.

AUTOMOBILES & HIGHWAYS
◆ Timothy Davis. National Park Roads: A Legacy in the American Landscape. Univ. of Va. Pr., 2016. 344 pp. $49.95. Details multiple factors influencing the roads’ design and development, and examines their role in shaping the national park experience—from the Blue Ridge Parkway and Skyline Drive to Glacier National Park’s Going-to-the-Sun Road, Yellowstone’s Grand Loop, Yosemite’s Tioga Road, and scores of other scenic drives.


AGRICULTURE & FOOD PROCESSING
◆ The Birth, Death and Rebirth of Rock Mill. OMN (Spring 2016), pp. 24-25. Restoration of grist mill of 1824 in Fairfield County, Ohio. The six-story timber-frame mill is dramatically sited on a rock cliff, 40 ft. above a gorge of the Hocking River.


BUILDINGS & STRUCTURES
◆ Oliver E. Allen. Riches Underfoot: The Vault Lights of Tribeca. Tribeca Trib (July 7, 2016). http://tribecatrib.com/content/riches-underfoot-vault-lights-tribeca. Identifies remaining locations of glass-lens vault lights that allowed daylight to pass through walkways into underground industrial spaces, as well as local businesses that manufactured and sold the panels of small, round, prismatic lenses that were set into lower Manhattan sidewalks.


◆ Michael Mark Chrimes. Architectural Dilettantes: Construction Professionals in British India, 1860-1910: The Advent of the Professional. CH, Vol. 31, No. 1 (2016), pp. 99-139. Extensively illustrated, describes how British administrations managed the design of public works and buildings. Most work was undertaken by engineers who had been trained for military service, which enabled them to undertake tasks all across the built environment including roads, railroads, irrigation, and public health projects. The lack of architectural training, however, often resulted in buildings that have been described as anachronistic.


CONTRIBUTORS TO THIS ISSUE

With Thanks.
architect’s 700-plus buildings ranged from simple redwood and stone homes in natural surroundings to Hearst Castle in San Simeon, with its sumptuous 1936 Neptune Pool.

- David W. Dunlap. **Pepsi-Cola Sign in Queens Gains Landmark Status.** NYT (Apr. 13, 2016), p. A20. As part of a concerted effort to clear a backlog of potential landmarks, the NYC Landmarks Commission designated the 44-ft.-high sign that once stood on top of Pepsi’s enormous bottling plant on Long Island City’s waterfront.

- Thomas Fuller. **In San Francisco, a Sinking Skyscraper and a Deepening Dispute.** NYT (Sept. 22, 2016). The 58-story Millennium Tower, completed in 2009, has sunk about 16 in. and is leaning 6 in. toward a neighboring skyscraper. Considered the largest reinforced-concrete building in the western U.S., its movement beyond design parameters has become a public scandal, bringing into question whether engineers and the city authorities have properly understood and monitored the risks associated with building in the earthquake-prone city.

- Jasenka Gudelj. **The Circulation of Building Materials: Pozzolana in the Baroque Dubrovnik.** CH, Vol. 31, No. 1 (2016), pp. 61-74. The introduction of pozzolana, a form of volcanic ash mixed with lime and water to form a waterproof hydraulic cement, to the Republic of Ragusa (modern-day Dubrovnik, Croatia) in the 17th and 18th centuries. Pozzolana had been known in Italy since Roman times. It is not only resistant to water, but proved effective in resisting the region’s frequent earthquakes.

- Jacques Heyman. **The Crossing Space and the Emergence of the Modern Professional Architect and Engineer.** CH, Vol. 31, No. 1 (2016), pp. 25-60. The technical challenge of designing and constructing the “crossing space” formed at the intersection of the nave and transepts of a large church or cathedral. Focuses on the latter half of the 17th century when Christopher Wren and Robert Hooke designed domes to solve the challenge.

- Micheline Nilsen. **The Working Man’s Green Space: Allotment Gardens in England, France, and Germany, 1870-1919.** Univ. of Va. Pr., 2014. 232 pp., illus. $39.50. A history of allotment gardens, small plots in locations separate from dwellings, assigned to working families. The gardens were a social program to create a place for recreation and food production. The story is carried up to WWI when the gardens became essential to the war effort. Rev: B&L (Spring 2016), pp. 105-6.


- Konrad Stump. **Ohio’s Pioneering Female Architect: Florence Kenyon Hayden Rector.** Timeline (July/Sept. 2015), pp. 26-41. The Columbus-based architect had no formal training but won the commission to design the first woman’s dormitory for Ohio State Univ. She also undertook numerous residential commissions.


- M. S. Uihlein. **Elmer Lawrence Corthell (1840-1916) and the Ambitions of a Civil Engineer.** CH, Vol. 31, No. 1 (2016), pp. 141-159. Once described as “one of the most prominent engineers of the Western Hemisphere,” the career of Corthell is surveyed with focus on three projects: Mississippi River jetties (1875-80), Tehuantepec Ship Ry. (1884-87), and consulting work for the Argentine Republic (1900-02).

**BRIDGES**

- Nicholas A. Bill. **Timber Bridge Construction on British and Irish Railways, 1840-1870: The Scale of Construction and Factors Influencing Material Selection.** CH, Vol. 31, No. 1 (2016), pp. 75-97. British railways are not usually associated with timber bridges, and the number of such bridges has usually been considered negligible, but a new database by the author indicates thousands were built during the middle decades of the 19th century. The author explores possible economic and technical reasons for the timber-bridge building boom.

- **Covered Bridge Topics, Vol. 74, No. 4 (Fall 2016)** includes Brown County, Ohio: Photographs by Harold M. MacKenzie and Others and A Covered Bridge Tour of Ripley, Indiana (reproductions of photos from the 1950s); Joseph D. Conwell, Who Built the Covered Bridges? The Social Organization of Building (comparison of regional differences in the organization of covered bridge building, e.g., 19th-c. New England towns vs. 20th-c. West Coast counties); and Philip S. C. Caston, Remarkable Deck Truss Discovered in Abitibi (200-ft.-long, 2-span timber Town-lattice variation truss in northwestern Quebec). Published quarterly by the National Society for the Preservation of Covered Bridges; www.coveredbridgesociety.org.


- Craig A. Shutt. **The Quiet Company.** Aspire, The Concrete Bridge Magazine (Summer 2016), pp. 6-9. Modjeski & Masters, consulting engineers, have been designing concrete bridges for 123 years.

**LUMBER & PAPER**

- **Historic American Paper Mill Technology Legacy Saved from the Wrecking Ball.** OMN (Spring 2016), pp. 22-23. A 1922 Brownwell 2-cylinder steam engine was transferred from Paper Mills Group International of Newark, N.J., to the Sugar Valley Regional Technical Center in Claremont, N.H., where it will be used as an educational tool. The engine originally powered a paperboard mill in Bloomfield, N.J.

- Michael W. Nagle. **Justus S. Stearns, Michigan Pine King and Kentucky Coal Baron, 1845-1933.** Wayne State Univ. Pr., 2015. 269 pp., illus. $39.99. Stearns was Michigan’s largest producer of lumber during the early years of the 20th century and the owner of a coal-mining operation in Stearns, Ky. He had interests in at least 30 businesses, making everything from kitchen utensils to game boards. Rev.: OMN (Spring 2016), p. 27.

Manufactured asbestos products were primarily intended for industrial and commercial end-uses and end-users. Although asbestos pipe insulation might be associated with a home furnace, and cement-asbestos panels commonly were used as siding on residential buildings, most asbestos products were intended for industrial and commercial applications. However, for a few products, there was a degree of trickle down to domestic articles for use in the home. Examples recently found by the author at antiques markets include a cement-asbestos ironing board, stove mats, and ironing kits that include asbestos iron rests. The stove mats and iron rests consist of asbestos textile.

A good perspective of how a preeminent manufacturer viewed its asbestos products and the products’ uses is afforded by the “data sheets” contained in Johns-Manville’s Engineers’ Handbook, Industrial Products (DS Series 22, collated Jan. 1952). The handbook reveals that J-M classified its products in the categories of sound control, electrical materials, insulation, packing (as in filler material used for void spaces), and refractory products, most of which were intended for industrial use. Non-industrial applications specifically presented in the handbook are largely limited to sound-absorbing ceiling tiles for office spaces. The author identified no references to household products in the handbook, likely because manufacturers of domestic goods were not the intended audience.

One of the author’s examples of the domestic use of a cementitious asbestos product is the 4-ft., 6-in. ironing table manufactured by S. J. Bailey & Sons. It appears to be the “sensational new Flex Board” asbestos-top ironing table offered for $4.95 in an advertisement for Snellenburg’s department store of Philadelphia in The Sunday Morning Star newspaper of Wilmington, Del., for Apr. 29, 1945. The ad notes that this “modern aid to housekeeping” will not burn or rust, and that steam will not affect it; these qualities are also noted on the label glued to the author’s example. Back tracking this product to the J-M handbook leads us to generic millboard (Sheet IN-110 dated July 1951, cancelling the sheet dated Aug. 1946). Millboard was a sheet or panel used for protection against fire, heat, and acid fumes in floors, partitions, and other locations and applications. With respect to the quality implied by the J-M trade name Flexboard, the photograph on the data sheet shows a piece of millboard flexing while being installed. The millboard used in the ironing table is only 0.1 inch thick.

The author also acquired examples of two products that consist of asbestos textile: two stove mats embellished with advertising, and two ironing kits complete with wax pads and asbestos iron rests.

The stove mats identify Japhia Clayton and his grocery store located at 68 Broad St. in Red Bank, N.J., with branch stores in Long Branch and Manasquan. The mats may have been given away as advertising devices. An advertisement for Clayton’s store appears in the Feb. 15, 1911, edition of the Red Bank Register.

The ironing kits were made by Gilcor Mfg. Co., Inc. of New York, N.Y. Each kit consists of a gauze-wrapped pad of violet-scented wax and an asbestos iron rest, glued to a placard. Gilcor most likely obtained the material for its iron rests as a finished product from an outside supplier. The July 1927 edition of Donnelley’s Red Book Classified Telephone Directory for Manhattan and the Bronx lists Gilcor at 30 University Place in Manhattan, under the category of Laundry Supplies. G.W. Bromley & Co.’s Manhattan Land Book of 1934 depicts a 6-story “lofts” building at 24-34 University Place (corner East 9th St.).

The texture of the “non-woven asbestos felt” shown in the Handbook of Asbestos Textiles (Asbestos Textile Institute, Pompton Lakes, N.J., 1967) is very similar to that of the

(continued on page 16)
stove mat and iron rest. This type of felt is described as produced in sheets, tapes, and rolls. The description also notes the addition of binding agents to provide strength; the stove mat is rigid even without its peripheral metal ring, which suggests the addition of such an agent. By the 1960s, non-woven asbestos felt had found use in the aerospace industry. The use of Canadian chrysotile asbestos is emphasized in the handbook. Chrysotile is the most common variety of asbestos, and was used in the widest range of products.

Because the author had two ironing kits, one of them could be sacrificed. A piece of the iron rest was submitted to EMLab P&K of Marlton, N.J., for analysis by polarized light microscopy (USEPA Methods 600/M4-82-020 and 600/R-93-116). The analytical results revealed that the asbestos content of the sample was 80 percent chrysotile and less than 1 percent crocidolite.

Large quantities of chrysotile were mined in Quebec for export to the U.S. Crocidolite was mined in South Africa (“Cape Blue” asbestos), Bolivia, and Australia, and is far less commonly encountered in manufactured products. The author’s research, albeit not exhaustive, did not identify chrysotile and crocidolite occurring in the same geological deposits. According to the 1967 handbook, chrysotile is associated with altered peridotite, while crocidolite is associated with argillite in quartzose schists—two substantially different mineralogical contexts.

A detailed account of the Canadian chrysotile industry is presented in the Canada Department of Mines publication Chrysotile-Asbestos: Its Occurrence, Exploitation, Milling, and Uses (1910). Chapter VIII (Commercial Applications of Asbestos) is a 44-page account of the products made from Canadian chrysotile and their uses. The chapter refers to a variety of kitchen articles, including table mats, baking sheets, stove mats, toasters (a heavy asbestos mat, not an electrical device), stove polishers (brushes that used asbestos cloth instead of bristles), iron holders, and asbestos-lined griddles, pie plates, and omelet pans.

The Canadian publication of 1910 makes brief reference to South African crocidolite, and devotes only a paragraph to the Australian. While crocidolite’s great tensile strength is admitted, its low resistance to heat in comparison to chrysotile is emphasized. The textiles handbook of 1967 notes that crocidolite was more difficult to process into a spinnable fiber than chrysotile, and is less resistant to heat. Crocidolite’s advantages over chrysotile are described as its greater tensile strength and its resistance to acids.

If chrysotile and crocidolite do not occur in the same geo-
logic deposits, then the trace presence of crocidolite in the iron rest begs an explanation. Considering its low resistance to heat relative to chrysotile, there would seem to be no advantage to deliberately adding crocidolite to any chrysotile product used for thermal applications. Moreover, the very low percentage of crocidolite—so low that it would not likely impart a benefit of any sort—suggests an incidental presence. The author sees at least two possible scenarios. The two types of asbestos may have been used at the plant that manufactured the chrysotile felt, with residual crocidolite lingering in the process equipment from an earlier run for a product whose composition called for crocidolite. Or, perhaps, the machinery on which the raw chrysotile was processed or packaged for shipment to the felt manufacturer may have contained residual crocidolite from a previous batch.

The author’s stove mats might have posed a health concern to the homemaker if airborne fibers were generated as the mats were crumpled or discarded. Greater threats were faced by the workers who manufactured the millboard and sawed it for S. J. Bailey & Sons, and who manufactured and cut the felt for Japhia Clayton and Gilcor. Unless the Flexboard was sawed while submerged or under a water spray, airborne fibers would have been released. Manufacturing and cutting the felt would also have liberated fibers.

Flea markets and antique shops are good sources of artifacts for the industrial archeologist (see SIAN (Summer 2010), pp. 14-15) and don’t involve the dangers and potential illegality of shipping an internet purchase of a hazardous substance.

Asbestos products found use in the household kitchen and laundry room for the same reasons they found use in industrial and commercial settings: mechanical durability, insensitivity to heat, and immunity to rust, mold, rodents, insects, and moisture.

Michael Bernstein

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**Indictments Follow SIA Visit to SUNY Campus near Albany**

It is part of SIA lore that sites we visit have an unfortunate tendency to go out of business. But the fate of one stop on the 2015 Albany tour is different.

From the moment SIA members walked into the SUNY College of Nanoscale Science & Engineering (SCNSE) it was clear something was off-kilter. Its large atrium featured multi-story hanging portraits of the college’s president, Dr. Alain Kaloyeros, showing him with local, state, national, and international politicians, an unusual display for an academic institution.

The visit to the NanoTech Complex’s clean room raised other questions. We were told that companies place equipment there and receive a tax benefit. In return the equipment is used to teach the college’s students. SIA members who have worked in the semiconductor industry noticed that the equipment was not as modern as described. In the clean room were employees of the equipment suppliers, none following clean-room protocols. Not a single student was spotted.

As the SIA left for our next stop, we tried to decide what it was we just saw. Was it simply a vast industrial subsidy in the form of a college? Or was it more of a scam, with corporations able to gain tax advantages for making their least productive equipment available to students?

In September, New York State Attorney General Eric Schneiderman announced indictments for a scheme he called “unusual in its brazenness.” Kaloyeros, along with a close friend of Governor Andrew Cuomo and seven others, were charged with rigging the bids for projects that included dormitories for the SCNSE campus we visited, and soliciting bribes that the defendants termed “ziti,” a phrase they learned from the TV show “The Sopranos.” Kaloyeros also faces federal wire-fraud charges. Subsequent investigations have shown the college to be $500 million in debt.

In October, Kaloyeros resigned the college presidency, leaving a job that had made him the highest paid employee of the state of New York. Within days, all mention of Kaloyeros was removed from the SCNSE website and all pictures of him, including those that welcomed us to the school, had been taken down.

Saul Tannenbaum with thanks to Edna Litten for her updates on this story
The following is a compilation of industrial heritage and related sites added to the National Register of Historic Places (U.S.) from July 2 to Sept. 30, 2016.

**American Tobacco Co., South Richmond Complex Historic District**, Richmond, Va. Considered the first and earliest example of the “horizontal approach” to tobacco storage and production. The complex was constructed from 1911 to 1929 and featured “closed” design, which allowed routine fumigation to kill the destructive tobacco beetle.

**Big Creek Hydroelectric System Historic District**, Big Creek, Calif. Facilities include 27 dams, miles of underground tunnels, and 24 generating units supplying power to Los Angeles from the San Joaquin River system. The earliest historic phase of development was 1913-1914 with subsequent phases in 1921-29 and 1948-60.

**Bimm Fireproof Warehouse**, Dayton, Ohio. Reinforced-concrete commercial warehouse of 1912 offered fireproof storage of furs, art, furniture, and other valuable goods. Listed under the Webster Station Area Multiple Property Submission (MPS).

**Blue Dome Historic District**, Tulsa, Okla. 17-sq.-block area of small-scale commercial buildings and large warehouse and industrial facilities, developed following arrival of Midland Valley and Santa Fe railroads in 1903 and 1905.


**Curtiss-Wright Aeroplane Factory**, Hazlewood, Mo. Albert Kahn-designed, WWII-era complex.


**Delco Building**, Dayton, Ohio. Dayton Engineering Laboratories Co. (Delco) production, research, and office building of 1915. Listed under the Webster Station Area MPS.

**E. L. Hughes Co. Building**, Louisville, Ky. 5-story brick building built in 1905-06 for distributor of window sashes, doors, blinds, and other millwork products.

**Edward Ford Plate Glass Co. Employee Relations Building**, Rossford, Ohio. Neoclassical office building of 1917 includes auditorium, gymnasium, and other facilities designed to enhance the company’s relationship with its workers.

**George C. Mansfield Co. Building**, Milwaukee, Wis. Industrial building of 1908 is an early example of a highly specialized and mechanized facility for producing and storing ice cream in mass quantities.

**Grain Belt Beer Sign**, Minneapolis, Minn. Iconic 50 x 40 ft. sign fabricated in 1941, has had several locations. Plans are to restore and relight the sign, now owned by the August Schell Brewing Co.


**Grossman Paper Box Co.**, Cleveland, Ohio. Established in 1880, became one of the largest and most successful packaging manufacturers in Cleveland.

**Guntersville Hydroelectric Project**, Guntersville, Ala. Completed by the TVA in 1939, the 94-ft.-high, 3,979-ft.-long dam has four generating units and two locks. Listed under TVA Hydroelectric System, 1933-1979 MPS.


**Kansas City Parks and Boulevards Historic District**, Kansas City, Mo. Interlocking system of City Beautiful parks and boulevards planned by landscape architect George E. Kessler starting in the early 1890s.


Lake Street Sash & Door Co., Minneapolis, Minn. A notable millwork company that occupied a 2-story brick factory complex of 1926-28.

Lee Paper Co. Mill Complex, Vicksburg, Mich. 30-acre complex of 2- to 5-story brick industrial buildings, the oldest of 1904. The “rag mill” converted the remnants of cotton textiles into fine paper.

Lion Knitting Mills, Cleveland, Ohio. Garment manufacturing complex of the 1920s, known for the production of a variety of knit goods, including the varsity or award-letter sweater.

M. M. Rhodes & Sons Co., Taunton, Mass. Modest but remarkably intact factory, founded in 1861 to manufacture shoe buttons, made the transition to insulated nails, staples, and various fasteners in the early 20th c. Operations ceased in 2008. The Rhodes family hopes to find a buyer who will renovate the complex using federal preservation tax credits.

Manassas Water Tower, Manassas, Va. 147-ft.-tall steel tower of 1914.


Milwaukee & St. Paul Ry. Combination Depot, Decorah, Iowa.

Mirro Aluminum Co. Plant No. 3, Manitowoc, Wis. Factory of 1929 noted for the construction of the Mirro-Craft line of lightweight pleasure boats.

NASA Lewis Research Center—Development Engineering Building & Annex, Fairview, Ohio. Construction of the center in 1961 was a direct response to the moon-landing project. Engineers developed rocket technology and launch vehicles.


North Lake View Industrial District, Birmingham, Ala. Includes 19 industrial buildings and warehouses of 1927 to 1951, notably the 1931 Dr. Pepper Syrup Plant and the 1936 Swann Chemical Co. Laboratory.

Pewabic Shipwreck Site, off Alpena, Mich. Wooden propeller steamship was lost in 1865 with cargo of copper from the Keweenaw Peninsula.


S.C. Baldwin Shipwreck, off Two Rivers, Wis. Steam barge of 1871, sunk in 1908. Listed under Great Lakes Shipwreck Sites of Wisconsin MPS.

St. Louis Mart & Terminal Warehouse, St. Louis, Mo. Art Deco skyscraper of 1933 designed by architect Preston Bradshaw is also known as the Robert A. Young Federal Building.


U.S. Post Office Department Mail Equipment Shops, Washington, D.C. Reinforced-concrete industrial building of 1918 at corner of 5th and W streets NE adjacent to the B&O RR Metropolitan Branch, used to manufacture mailbags, locks, mailboxes and keys until 2002; the only such shop of the USPS.


Wayzata Bay Wreck, Minnetonka vicinity, Minn. Wooden barge of 1879 was used by railroad tycoon James J. Hill to haul cordwood. Listed under Wrecks and Submerged Cultural Resources of Lake Minnetonka MPS.

(continued on page 21)
1938 Film of Clay Pipe Making at Broseley Clay Tobacco Pipeworks (www.youtube.com, search on title). Documentary on the history of the pipeworks, now an Ironbridge Gorge (U.K.) museum, includes footage of the manufacturing process from a silent movie of 1938.

Catskill Archive (www.catskillarchive.com). Website devoted to the history of New York’s Catskill Mountain region includes info on tourist hotels and railroads, as well as a wide-ranging selection of local history.

Chicago Public Library Blogs, Technology That Changed Chicago (www.chipublib.org/author/benedict). A series of blogs by a long-time librarian features many entertaining illustrated essays on IA-related topics including streets, Chinese laundries, gaslights, skyscraper air rights, and the evolution of building foundations.


HAER National Covered Bridges Recording Project (www.nps.gov/hdp/project/coveredbridges/index.htm). Highlights work undertaken by the project since its establishment in 2002 by the National Park Service’s Historic American Engineering Record (HAER) and the Federal Highway Administration. Documentation of 86 covered bridges, a National Historic Landmark context study, two national conferences, a traveling exhibit, and publication of Covered Bridges and the Birth of American Engineering.

The Trackside Photographer (http://thetracksidephotographer.com). Dedicated to the railroad landscape, website publishes photographs and articles documenting both historical and present-day railroad environments. The focus is emphatically on what is along the tracks, not what is on the tracks. The editors welcome submissions for inclusion in the vetted galleries.

Publications of Interest (continued from page 14)

following the introduction of Linn log-hauling tractors. This informal history includes personal recollections of river drives and life in the lumber shanties, images of early mechanical logging equipment, as well as recipes from the lumber camp cook shack.

Power Generation

Laura Corley. Plant Harllee Branch Demolition ‘Another Piece of History Gone’. The (Macon, Ga.) Telegraph (Oct. 16, 2016). Georgia Power Co. decommissioned the coal-fired plant at Lake Sinclair last year. The plant, which had been in service since the early 1960s, featured a 1,000-ft. smokestack.

Windmills’ Gazette, Vol. 34, No. 3 (Summer 2015) includes T. Lindsay Baker, A Close Look at the Star Model 24 Windmill (fabricated by Flint & Walling Mfg. Co., Kendallville, Ind., during the 1920s); Christopher Gillis, Windmills as Pond Aerators—Part Two (applying compressed air generated by windmills to aerate fish ponds, starting in the 1970s); and Etienne Rogier, Eureka Bonnet: Restoration of an American-style Windmill in France (windmill of the late 1880s in Belarga). Vol. 35, No. 4 (Autumn 2016) includes Christopher Gillis and T. Lindsay Baker, Portable Windmills (self-governing, horse-drawn windmills from the 1850s to present); Armando Carvalho Ferreira, The Portuguese Tower Windmills for Grinding and Their Millwrights (large steel windmills proliferated in northwest Portugal in the early part of the 20th century); and T. Lindsay Baker, Sid’s Shmugdollon (Sid Bowlin of El Paso, Tex., was head of a windmill erection crew). Avail: $20/yr., published quarterly. Christopher Gillis, Editor, Box 788, Buckeystown, MD 21717; www.windmills gazette.org.

Abbreviations:

CH = Construction History, Journal of the Construction History Society
CHSA = Construction History Society of America
IA News = Bulletin of the Association for Industrial Archaeology (U.K.), www.industrial-archaeology.org
MHJ = Mining History Journal, published by the Mining History Assn.
NYT = New York Times
OMN = Old Mill News, published by the Society for the Preservation of Old Mills (SPOOM)
Timeline = published by the Ohio Historical Society, $40/yr. Info: (614) 297-2315
TT = Timber Transfer. Published by Friends of the East Broad Top. Avail. with membership, $30/yr.; www.febt.org.

Publications of Interest are compiled from books, articles, and digital media brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books, articles, CDs, DVDs, etc., especially those in their own areas of interest and those obscure titles that may not be known to other SIA members. Publications of Interest, c/o Marni Blake Walter, Editor, SIA Newsletter, 11 Esty Rd., Westmoreland, NH 03467; sianeditor@siahq.org.
The Historic Shipwrecks of Lake Ontario Project, funded by Toledo's National Museum of the Great Lakes, has announced the discovery of the sloop Washington, believed to be the oldest confirmed commercial sailing shipwreck to have been found in the Great Lakes. She was constructed in 1797-98 near Erie, Pa., and is regarded as the first sloop built on Lake Erie and the first to sail in both lakes Erie and Ontario. In 1802, she was transported around Niagara Falls over the portage road. She sank in Nov. 1803 after sailing out of Kingston, Ont., harbor and encountering a storm. The survey team identified the Washington in deep water off Oswego, N.Y. in June 2016. Info: www.shipwreckworld.com/articles/sloop-washington-discovered-lake-ontario.

The Matton Shipyard, located in Peebles Island State Park in Cohoes, N.Y., at the junction of the Mohawk and Hudson rivers, has received a $5,000 grant from the National Trust for Historic Preservation to assist with conducting a feasibility and master-planning study to advance the repair, interpretation, and re-use of the shipyard structures. The shipbuilding and repair facility operated from 1916 to 1983. The shipyard is considered one of the few remaining intact industrial complexes of its type within the Erie Canalway National Heritage Corridor.—NY History Blog (Aug. 25, 2016)

The Museum of the American Railroad (Frisco, Tex.) is undertaking an ambitious project to restore the museum’s ALCO PA-1 diesel locomotive, Santa Fe #59L. This early generation, streamlined diesel will be restored to its 1950s Santa Fe red-and-gold livery. The museum acquired the diesel from the Smithsonian Institution, which had acquired it from Mexico in 2000. It was in poor condition due to a 1981 derailment in Mexico. To learn more about the project or make a donation: www.museumoftheamericanrailroad.org/collection/restorationprojects/projectAlcoPA

The Railroad Museum of Pennsylvania (Strasburg) held a dedication ceremony for the restored Pennsylvania RR E6s steam locomotive No. 460 on Nov. 5. Built in 1914 by the PRR in its Juniata Shops in Altoona, it is the sole survivor of a fleet of 83 Pennsylvania E6 Atlantic-type 4-4-2 locomotives. The comprehensive cosmetic restoration was accomplished with a $370,000 contribution from the museum’s friends group and over 29,000 man-hours of work. In a side note, No. 460 is sometimes referred to as the Lindbergh Engine because of its high-speed trip on June 11, 1927 from Washington, D.C. to New York City to deliver film of Charles Lindbergh receiving an award from President Calvin Coolidge for the aviator’s trans-Atlantic flight. The train covered the 216 miles in 176 minutes while pulling a special baggage car with a darkroom for processing the film. This allowed the International News Reel Co. to deliver its film to New York theaters before a rival company, which used an airplane. The plane actually arrived in New York before the train but the film on the plane hadn’t been processed.—Museum Press Release (Oct. 24, 2016)

Wheeler Hydroelectric Project, Rogersville, Ala. Completed by the TVA in 1936, the massive 72-ft.-high, 6,342-ft.-long dam on the Tennessee River has two locks and 11 generating units. Listed under TVA Hydroelectric System, 1933-1979 MPS.

William Connors Paint Mfg. Building, Troy, N.Y. Factory complex of the late-19th c., associated with a successful ready-mixed paint business [see article in this issue].

William J. Braitsch & Co. Plant, Providence, R.I. Three-story brick factory and engine house of 1892 for the manufacture of silver and gold specialty goods.

Wright Brothers Memorial, Wright-Patterson Air Force Base vicinity, Dayton, Ohio. The memorial park on Tate Hill was designed by Olmsted Brothers and dedicated in 1940.

IA on the National Register is compiled from the National Register Weekly List supplemented by information gleaned from other sources.
CHAPTER NEWS

Northern Ohio. On Sept. 24, the chapter held its annual picnic at Mill Creek Park in Youngstown. The park is part of Ohio’s oldest metropolitan park district, established in 1891, and is one of the largest U.S. parks located entirely within the limits of a city. Before enjoying a picnic lunch, the group toured Lanterman’s Mill, a working water-powered flour mill built in 1846. After lunch the group toured the Youngstown Historical Center of Industry & Labor, a museum dedicated to the steel and coal industries, once Youngstown’s main economic drivers.

Northern Ohio SIA Chapter members posing with life-size statues of steelworkers at the Youngstown Historical Center of Industry & Labor

Oliver Evans (Greater Philadelphia) members visited a new archeology exhibit at the Museum of American Glass at Wheaton Arts & Cultural Center in Millville, N.J. (Oct. 15). The exhibit is the first to display some of the nearly one million artifacts recovered from excavations along a major I-95 reconstruction project in Philadelphia. One of the sites explored by archeologists from consulting firm AECOM was the Dyottville Glass Works.

The chapter co-sponsored a lecture and book signing by Aaron V. Wunsch and Joseph E. B. Elliott [SIA] for their new book, Palazzos of Power: Central Stations of the Philadelphia Electric Co., 1900-1930 (Princeton Architectural Pr., 2016). The stations, which now stand vacant and silent, were documented by Elliott using large-format photography. Wunsch, a professor in the University of Pennsylvania’s Graduate Program in Historic Preservation, wrote the history and architectural commentary.

Roebling (Greater N.Y.-N.J.) held its annual Great Falls Symposium on the IA of the New York-New Jersey Area at the Rogers Meeting Center in Paterson, N.J. on Oct. 23. Among the presenters were Patrick Harshbarger, Rogers Locomotive Works Erecting Shop; Sandy Needham, Gold and Glass in Romanian History; Bode Morin, Death of the Huber Breaker: The Loss of an Anthracite Icon; Darren Boch, Paterson Great Falls National Park General Management Plan; and Gianfranco Archimede, Next Steps in the S.U.M. Raceway: Industrial Heritage and Water Management in Paterson. In the afternoon, participants took a guided walking tour of the S.U.M. Raceway and Hinchcliffe Stadium.

The Chapter offered a full slate of late summer and autumn tours. Members took a walking tour of the Sterling Iron District in northern N.J. (Aug. 13), hiked with Joe Macasek and Bierce Riley to Powerville, N.J., site of an iron forge and rolling mill on the Morris Canal (Aug. 28); enjoyed a tour of Brooklyn’s Green-wood Cemetery guided by chapter member Jim Mackin (Sept. 17); attended the chapter’s annual corn roast at Gerry Weinstein’s Engineerium (Oct. 1); cruised the Hudson River from Beacon to Pollepel Island to view Bannerman Castle, an abandoned, castle-like, munitions warehouse (Oct. 9); took an educational tour of the digester eggs at the Newtown Creek Wastewater Treatment Plant of the NYC Dept. of Environmental Protection (Oct. 11); hiked the Morris Canal Inclined Plane 4 West with Joe Macasek (Oct. 15); and reprised the popular behind-the-scenes tour of Grand Central Terminal (Nov. 3).

Southern New England had a bicycle tour along the Sudbury Aqueduct in Needham and Wellesley, Mass., from Echo Bridge to Waban Arches (Aug. 13). The Amesbury Carriage Museum organized a tour of several sites in Amesbury, Mass., including a walk through the Hamilton Woolen Mill complex and the “Carriage Hill” residential area (Sept. 10).

Support Your Local Chapter. For info on a chapter near you or to start one, contact Ron Petrie, SIA Director, Local Chapter Chair (ron@siahq.org) or check out the local chapters section of the SIA website (www.sia-web.org). ■

CORRECTION

The Minutes of the SIA’s 45th Annual Business Meeting, June 4, 2016, as published in SIAN, Vol. 45, No. 3 (Summer 2016), page 9, should have indicated that an Industrial Heritage Preservation Grant had been awarded to a “joint application between the American Textile History Museum (ATHM) of Lowell, Mass., in partnership with the Historic American Engineering Record.” The uncorrected minutes mention “a textile museum” without mentioning the ATHM by name.

MEMBER NEWS

Jay McCauley

The Hagley Museum & Library (Wilmington, Del.) holds an annual series of research seminars highlighting innovative scholarly essays. The 2016-17 series includes Amanda Casper, Univ. of Delaware, New Business from Old Houses: Promoting Electricity through Home Alteration in Progressive Era Philadelphia (Dec. 8); Amrys Williams, Wesleyan Univ., Reimagining the Modern Farm: Ecological Development and 4-H’s New Deal for Agriculture (Jan. 19); Tyler Anbinder, George Washington Univ., and Simon Wegge, College of Staten Island, New York’s Irish Famine Immigrants: Savings, Economic Mobility, and Networks (Feb. 16); Jenifer Van Vleck, Yale Univ., Constructing the World: Morris-Knudsen and the Business of Modernization (Apr. 20); and Jeannette Estruth, New York Univ., Silicon Valley Conservation: Redefining Environmental and Labor Politics, 1970-1995 (May 18). The seminars are held on Thursday evenings at 6 p.m. in the Library’s Copeland Room. Those planning to attend are encouraged to read the respective paper in advance, as the author does not deliver a lecture. For papers, contact Carol Lockman, clockman@hagley.org; (302) 658-2400, ext. 243.

WORKSHOPS & CONFERENCES

The Hagley Museum & Library (Wilmington, Del.) holds an annual series of research seminars highlighting innovative scholarly essays. The 2016-17 series includes Amanda Casper, Univ. of Delaware, New Business from Old Houses: Promoting Electricity through Home Alteration in Progressive Era Philadelphia (Dec. 8); Amrys Williams, Wesleyan Univ., Reimagining the Modern Farm: Ecological Development and 4-H’s New Deal for Agriculture (Jan. 19); Tyler Anbinder, George Washington Univ., and Simon Wegge, College of Staten Island, New York’s Irish Famine Immigrants: Savings, Economic Mobility, and Networks (Feb. 16); Jenifer Van Vleck, Yale Univ., Constructing the World: Morris-Knudsen and the Business of Modernization (Apr. 20); and Jeannette Estruth, New York Univ., Silicon Valley Conservation: Redefining Environmental and Labor Politics, 1970-1995 (May 18). The seminars are held on Thursday evenings at 6 p.m. in the Library’s Copeland Room. Those planning to attend are encouraged to read the respective paper in advance, as the author does not deliver a lecture. For papers, contact Carol Lockman, clockman@hagley.org; (302) 658-2400, ext. 243.

Call for Papers (continued from page 5)

for your presentation (e.g., media embedded vs. linked to the Web).

For 90-minute themed sessions or panel discussions, the organizer should submit a title and a brief description of the theme, along with all above information together as a group as prompted on the online submission form. If any of these items is missing, the proposal cannot be considered. Note that the above word counts apply separately to each presenter in a group.

Presenters are encouraged to transform their presenta-

tions into articles for IA: The Journal of the Society for Industrial Archeology. No conference proceedings are published.

Deadline for proposals is Feb. 17, 2017.

To submit your proposal and for further information, go to the online form located at www.sia-web.org/sia-46th-annual-conference/.

For questions please contact Saul Tannenbaum, SIA Presentations Committee Chair, saul@tannenbaum.org.
CALENDAR

2017

Jan. 4–8: Society for Historical Archaeology Annual Conference, Fort Worth, Texas. Info: http://sha.org/conferences/.


2018