



# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume 51

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Number 1

# BUFFALO'S GREAT NORTHERN GRAIN ELEVATOR AWAITS ITS FATE

**T**he future of the Great Northern grain elevator in Buffalo, N.Y. (tour site, 1992 Annual Conference)—possibly the last of the “brick-box” grain elevators in the world—is in limbo while the battle of preservation versus demolition plays out.

Built in 1897 to support Buffalo’s fast-growing grain industry, the Great Northern was the largest operating elevator in the world, and the first to be operated with the use of electricity—in fact, the first to run AC power from the new Niagara Falls-based power plant designed by Tesla and Westinghouse. Many cereal and flour companies moved to

Buffalo, including General Mills, which still has a large factory near the grain elevator. The city became one of the biggest grain ports in the world during the early to mid-20th c., receiving tons of wheat from Midwestern farms via the Great Lakes to what is now known as “Elevator Alley.”

The Great Northern elevator, with its dozens of steel silos or bins housed inside a brick exterior, was one of the most prominent, especially due to its sheer volume. The facility’s 48 bins could store a total of 3 million bushels, an unheard-of number for the period.

According to the HAER report (NY-240), the Great

*(continued on page 2)*



Joseph Rennie

*Buffalo’s Great Northern grain elevator, 2022.*

### In This Issue:

- Annual Conference Preview: Portland, Ore., June 9–12
- Mass. Museum Installs Steam Engine Exhibit
- West Point Foundry Site NHL Dedication
- Army Terminal Structures Demolished
- Remembering William Hachtel, 1929–2021

## **BUFFALO'S ELEVATOR** (continued from page 1)

Northern elevator was built to the general design of noted Chicago elevator builder D. A. Robinson. The idea of raising the bins on columns may have come from James J. Hill, president of the Great Northern Ry. Robinson was also responsible for the design of the machinery within the elevator. He worked in collaboration with Max Toltz, Great Northern Ry.'s bridge engineer, who was appointed Consulting Engineer during construction. Toltz appears to have been responsible for the detailed working of Robinson's general designs. This collaborative effort produced a number of joint patents covering the various innovations introduced in the Great Northern.

A massive cousin to the Buffalo elevator survives in Superior, Wis., the Great Northern Elevator "S," built a few

years later in 1901 and also engineered by Max Toltz for the Great Northern Ry.

The building slowly fell out of use as Buffalo's primacy in the grain business faded in the mid-20th c. After shuttering in 1981, it was recognized as a local landmark in 1990. Archer Daniels Midland (ADM) acquired the building in 1992.

After a Dec. 2021 storm damaged a large section of the brick exterior, ADM insists that the building is an imminent danger to public safety and applied for an emergency permit to raze it. (This is the third time ADM has sought to demolish the structure.) In mid-Jan., the city approved the demolition permit over the objections of federal and state lawmakers and local preservationists. In response, a state appellate division preliminary injunction was sought to forestall demolition.

The Campaign for Greater Buffalo History, Architecture & Culture prepared a schematic model to show that the grain elevator is structurally sound and in no danger of collapsing, contrary to statements from ADM. The model relied on historical documents and drone photographs and video of the grain elevator to develop the design drawings. The model shows 20 pairs of central columns supporting a network of 5-ft. steel I-beam rafters and, in combination with 6,000 pilings into the bedrock, the columns are able to absorb massive amounts of weight and wind loads. These materials were part of a package the group presented to the court in late Jan. 2022 in its argument against demolition. The group states that the hole in the brick exterior does not affect the structure. The state appellate judge granted preservationists a temporary restraining order to stop demolition.

SIA will continue to follow this story as it develops.

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; household (joint) \$55; full-time student \$20; institutional \$75; 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; email: [sia@siahq.org](mailto:sia@siahq.org); website: [www.sia-web.org](http://www.sia-web.org).

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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:** Marni Blake Walter, Editor, *SIA Newsletter*, 11 Esty Rd., Westmoreland, NH 03467; [sianeditor@siahq.org](mailto:sianeditor@siahq.org).



**Southeast view of the Great Northern elevator, 1985.**

# Death of an Army Terminal

**O**n Aug. 8, 2021, New York Harbor was shaken by an explosion, and 1.5 million sq. ft. of historic structures came tumbling down.

The Military Ocean Terminal Bayonne (MOTBY) was originally conceived as a commercial facility, a 440-acre manufactured peninsula for rail and maritime shipping. In 1940, with World War II looming for the U.S., the Navy took it over and completed the project, building the Naval Supply Depot (NSD), Bayonne and an annex to the Brooklyn Navy Yard. This shipyard, with a 1,092-ft. dry dock, would allow for docking of ships that were too large to fit underneath the Brooklyn and Manhattan Bridges, and was used to remove superstructure components (antennae, stacks, etc.) that would allow ships to access the main yard in Brooklyn. In addition to the shipyard facilities, by the end of the war, NSD Bayonne was home to 20 warehouses, five transit sheds, and one cold storage facility, with 3.8 million sq. ft. of covered storage space, making it the Navy's second-largest supply base on the east coast (after Mechanicsburg, Pa.).

After the war, Bayonne became home to the Atlantic Reserve Fleet, with dozens of mothballed ships berthed at the peninsula. In the 1950s and 1960s, New York Harbor underwent a major upheaval, as containerization shifted the shipping industry's center of gravity from South Brooklyn and Manhattan's West Side to new terminals in New Jersey that had better rail, highway, and airport access. In Nov. 1964, the Pentagon announced plans to close 95 military bases across the globe, and several New York facilities got the ax. The Brooklyn Navy Yard, in part due to the bridge obstructions, was closed by June 1966, and the Brooklyn

Army Terminal, with vast indoor warehouses unsuited to containerized cargo, closed in December. The following year, Bayonne took Brooklyn's place; the base was transferred from the Navy to the Army, with the exception of the shipyard (which was famously lampooned on SNL in 1979 [[www.youtube.com](http://www.youtube.com), S4 E15], mocking the Navy's "Adventure" ad campaign [[www.youtube.com](http://www.youtube.com)]). Renamed MOTBY, it continued to be used through the Vietnam War, various Cold War operations, and was a major base for Operations Desert Shield and Desert Storm in 1990–91. Countless service members remember Bayonne as the place to drop off their cars and other belongings when being deployed overseas, as it was a huge center for "non-temporary storage," the military's term for personal stuff.

Like in 1964, the military underwent another major facilities closure in 1995, the Base Realignment and Closure (BRAC), which recommended closing MOTBY for good, and it was shuttered in 1999. The City of Bayonne took over the site, and many ambitious ideas were floated—housing, a movie studio, even a professional sports stadium. Portions of the base were peeled off for various uses; the shipyard was taken over by private operator Bayonne Dry Dock in 1997 (and it still frequently services ships of the Military Sealift Command), the Cape Liberty Cruise Port opened in 2004, the Coast Guard kept a sliver, and the rest has been carved up for housing, the Port Authority, and commercial development.

That left a vast array of World War II-era warehouse buildings. Since 2018, Lincoln Equities has been redeveloping 153 acres in the center section of the site for a major logistics hub for UPS and other shipping and e-commerce

*(continued on page 12)*



**MOTBY Water Tower, March 2016.**



**Bayonne waterfront, with the imploded buildings visible on the left, Aug. 2021.**

# Industrial History Center Opens to Visitors

## Steam Engine Salvaged and Exhibited

After several years of planning, fundraising, and development, a new venue for industrial history has opened in Amesbury, Mass. The Industrial History Center (IHC) is a 2,800-sq.-ft. venue for exhibits and programs offered by the Amesbury Carriage Museum—a local history museum with a mission to “champion the history of Amesbury’s industry and people.”

The IHC is in the ground level of a ca. 1826 textile mill, once part of the Salisbury Mfg. Co. The building is owned by Amesbury Industrial Supply, an old-school, all-service, hardware store with over 10,000 ft. of retail space. It is an amazing adjacency that will provide important program partnerships for the future.

The IHC supports programs offered by the Amesbury Carriage Museum with a focus on connecting people to the built environment. The Amesbury millyard has a rich history to explore, including the Powow River (the source of power for 17th-c. water-powered mills) and an inventory of buildings once part of the local textile, carriage, and auto-body industries.

The IHC serves as a starting point to introduce visitors,

school groups, and others to Amesbury’s industrial history. It houses an orientation exhibit, “A Productive Story: Industry and Worklife in Amesbury,” which offers a thematic introduction and is keyed into a school curriculum and tour.

The exhibit was curated by ACM executive director, John Mayer [SIA] and designed by Keith Ragone, of Keith Ragone Studio, Newfield, N.J. John and Keith have a decades-long partnership in exhibit production beginning when they both worked for the Atwater Kent Museum in Philadelphia.

One of the largest artifacts on view in the new exhibit at the Industrial History Center is a ca. 1890 “trunk bed” steam engine made by the Porter Mfg. Co. of Syracuse, N.Y. The engine is a stand-in for the industrial machinery that was once part of the mill complex.

The Porter engine was discovered and acquired at the 2019 “Yankee Steam Up” at the New England Wireless and Steam Museum (<https://newsm.org/>) in East Kingston, R.I. The engine had been salvaged from an ice company in Barnstable and restored to working condition by expert mechanic Jim Paquette of Uxbridge, Mass.

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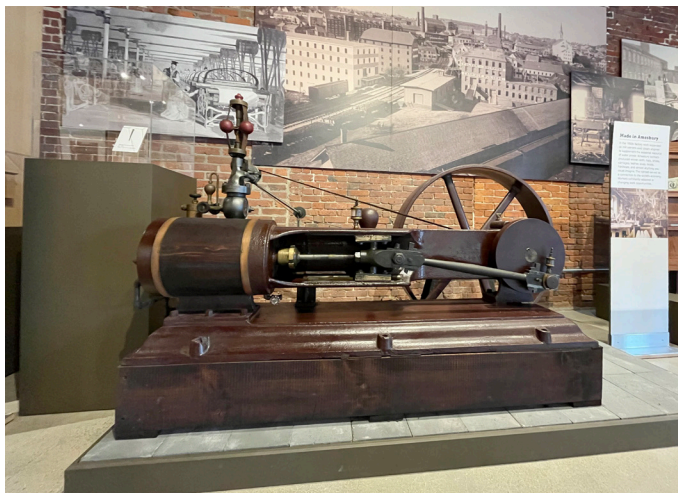
John Mayer

Winter view of the Industrial History Center.



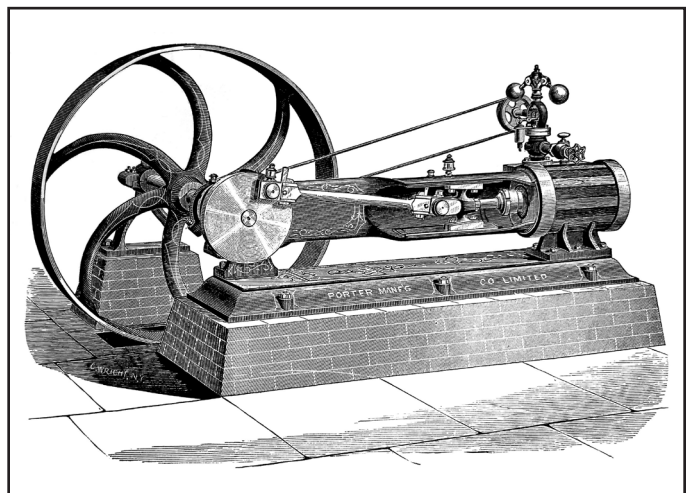
John Mayer

View of the exhibit, “A Productive Story,” in the IHC.



John Mayer

The Porter steam engine on display.



Private collection

Illustration from the Porter Mfg. Co. steam engine catalog.

# “Research Project of Worth”: The West Point Foundry Archeological Site as a National Historic Landmark

On Nov. 13, 2021, Scenic Hudson hosted a public ceremony in Cold Spring, N.Y. to celebrate the designation of the West Point Foundry Archeological Site as a National Historic Landmark (NHL). Set apart from those listed in the National Register of Historic Places, sites nominated as NHLs must demonstrate a clear and outstanding role in American history. The site was added in Jan. 2021 following an intensive nomination and review process. Recognition of the West Point Foundry Archeological Site with this honor is a major preservation milestone for a place well captured in IA studies and publications since the 1970s (see *IA* theme issue Vol. 35, Nos. 1 and 2, for instance) but far less acknowledged in American history and its industrial heritage.

The story of this remarkable industrial site began in 1817 when Gouverneur Kemble, an ambitious New York merchant with some knowledge of cannon-making and general foundry work, organized like-minded associates to underwrite a multifaceted foundry that could reliably supply ordnance to the U.S. War Dept. The West Point Foundry (or WPF as identified on its cannons and pig iron) took shape in a narrow ravine adjacent to the village of Cold Spring on the eastern shore of the Hudson River, opposite the U.S.

Military Academy at West Point. From its outset, the WPF featured not only a foundry but also a water-powered boring mill and heavy forge shop and soon included a machine shop and nearby blast furnace. By the 1830s, the WPF was a leading supplier of cannon as well as marine and stationary steam engines and a domestic pioneer in the manufacture of railroad locomotives. Peaking during the Civil War with its production of the well-known “Parrott Gun,” the WPF experienced a gradual decline against expanding and specializing competition before its abandonment in the early 1910s.

Despite decades of neglect and salvage, the site retained enough integrity that growing interest in its study and preservation emerged in the 1970s, leading to its initial listing in the National Register in 1973, an archaeological assessment led by early IA champion Ed Rutsch in 1979, and then purchase and protection of the 93-acre site in 1996 by Scenic Hudson. Sponsored by Scenic Hudson and led by emeritus professor Pat Martin [SIA], graduate students and faculty of the Industrial Archaeology program at Michigan Technological University (MTU) undertook archeological studies of the site from 2001 to 2008. The results of their work formed a new body of scholarship on heavy ironworking industry

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**THE WEST POINT FOUNDRY SITE (1817-1911)**, Cold Spring, NY, has been placed on the Natl Register and plans are underway to develop it as part of a hotel (125-room Hilton)-marina complex by the Deuterium Corp (heavy water prodn) through their wholly-owned subsidiary, “Old Foundry Corp” DC officials propose conversion of the Foundry ruins into a park, restoration of the Victorian office for use as a museum and tourist center, and in time, partial reconstruction of the Foundry and its operation to manufacture reproductions of its original products. (Some of its products, we must suppose: WPF was a leading mfg of large iron and brass castings, heavy machinery, and ordnance, and at mid-19thC was considered the largest establishment of its kind in America.) The new marina will utilize the site of the former RR pier, built for deep-water shipping. According to DC’s press release, the property is being developed “to increase the worth of Deuterium Corp through capital appreciation of its real estate and diversification into fields of general public use.”

*SIAN* Vol. 2, No. 1 (Jan. 1973), p. 4—*announcement that the WPF had been listed in the National Register amidst plans advanced by the Deuterium Corp. to partially redevelop the site.*

**Research project of worth. West Point Foundry, Cold Spring, NY [SIAN 2:4:4].** Major 19th-early 20thC mfg machinery & ordnance. Some remains; much verbal & graphic documentation avail. Editor.

*SIAN* Vol. 3, No. 6, p. 8 (Nov. 1974)—“*Research project of worth*”



*National Historic Landmark plaque for the West Point Foundry Archeological Site.*

Arnon Kotlensky

## WEST POINT FOUNDRY *(continued from page 5)*

of the antebellum decades that was underrepresented in IA research. Parallel with MTU's investigations, Scenic Hudson carried on with plans to preserve and interpret the West Point Foundry within a passive park for visitors to enjoy the now-wooded setting and Foundry Brook that cascades through it.

In 2010, the West Point Foundry Archeological Site entered the National Register for a second time for recognition of its importance as an industrial archeological site, and in 2019, the American Society of Mechanical Engineers recognized it as a Historic Mechanical Engineering Landmark. Yet the designation of the West Point Foundry Archeological Site as an NHL spotlights its nationally important but lesser-known historic impacts and its rich archeological value that few comparable sites can offer (for example, the well-known Tredegar Iron Works in Richmond, Va. does not retain the same degree of pre-1860 archeological potential as the WPF site possesses). At the ceremony in Nov. 2021, Scenic Hudson president Ned Sullivan spoke of the site as an unmatched intersection of history and ecology in the Hudson Valley before unveiling the bronze plaque given by the National Park Service. The plaque and the remarkable work behind it attest to the rediscovery of the West Point Foundry in American history and the promise of industrial archeology.

For more detailed history about the WPF, consult the West Point Foundry Archeological Site NHL nomination ([www.nps.gov/subjects/nationalhistoricalandmarks](http://www.nps.gov/subjects/nationalhistoricalandmarks)), the American Society of Mechanical Engineers, West Point Foundry brochure #272 ([www.asme.org/about-asme/engineering-history/landmarks/272-west-point-foundry](http://www.asme.org/about-asme/engineering-history/landmarks/272-west-point-foundry)), and MTU's West Point Foundry project website ([www.westpointfoundry.org](http://www.westpointfoundry.org)).

The West Point Foundry Preserve is open to visitors every day of the year, from dawn to dusk, free of charge. Occa-

sional tours are given by staff at Scenic Hudson and the Putnam History Museum ([www.scenichudson.org](http://www.scenichudson.org), [www.putnam-historymuseum.org](http://www.putnam-historymuseum.org)). Putnam History Museum, conveniently located next to the Preserve, features a permanent exhibit about the West Point Foundry.

T. Arron Kotlensky



Arron Kotlensky

*View of the 1865 Office Building of the West Point Foundry, the only standing building related to the site's period of significance (1817–1867).*

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## IHC *(continued from page 4)*

The engine features a 42-in. dia. flywheel and would have generated 8 h.p. of energy. Displaying this relatively small engine is a way to represent the theme of new forms of power. A video about the engine and its move into the museum space can be viewed on YouTube ([www.youtube.com](http://www.youtube.com), search Amesbury steam engine).

Historical research has revealed details describing the introduction of steam engines in Mill 2. An 1859 article in the Amesbury Villager announced the installation of three new steam engines "to carry on the works in case of a short supply of water" including a 100-h.p. Greene steam engine (made at the Providence Steam Engine Co.) that was used to power Mill 2. Unfortunately, there is no record of when the engine was removed from the site.

From the time John Mayer was appointed executive director of the ACM in 2016, he has developed an ongoing partnership with the regional chapter of the SIA. Every year the ACM hosts a special program developed with volunteer researchers and members of the SNEC-SIA.

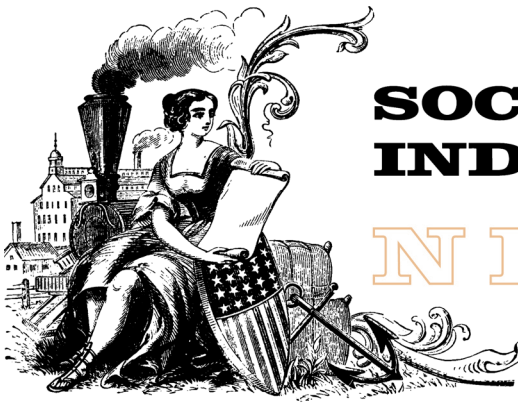
For more information, visit the museum website at [www.amesburycarriagemuseum.org](http://www.amesburycarriagemuseum.org). The site features a robust catalog of news articles and research reports generated by the Industrial Survey Group.

John Mayer



Claire Logsdon

*Mark Forlow and Arron Kotlensky lead a tour of the site following the unveiling ceremony.*



# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

### PUBLICATIONS OF INTEREST

Vol. 51, No. 1

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COMPILED BY

Mary Habstritt, New York, N.Y., Patrick Harshbarger, Wilmington, Del., and Marni Blake Walter, SIAN editor, Westmoreland, N.H.

#### GENERAL INTEREST

- ◆ **Engineering Heritage Australia Magazine**, Vol. 3, No. 9 (Sept. 2021) covers stories in which water plays a pivotal role—a flood, a shipwreck, and drainage and water supplies in two cities. Includes Warrwick Hoad, *The Story of the Paddle Steamer SS Phoenix*; Jennifer Preston, *Edward Bell, Sydney City Engineer 1856 to 1870*; Perry Beor, *Engineering Out an Epidemic or Rediscovering a Perth “Foundation Stone”*; Bill Phippen, *Repairing Kempsey Railway Bridge after Damage from the Record Flood of 1950*; also includes a piece by editor Margret Doring on Ray Boyle of Rockhampton, possibly EA’s longest-serving and oldest member; and various news items.
- ◆ Kevin Krajic. **In Old NYC Lumber, Researchers Find Clues to Region’s History**. *Columbia* (Winter 2021–22), p. 46. [magazine.columbia.edu](http://magazine.columbia.edu). Dendrochronology is being applied to lumber from old buildings being demolished or renovated to gain insights into historic climate change.
- ◆ Jeffrey Ladd. **A Field Measure Survey of American Architecture**. Mack, 2021. 368 pp., photos. \$50. Drawing from the nearly half a million photographs and documents comprising the Historic American Buildings Survey (HABS) held in the U.S. Library of Congress, this book constructs a fictional road trip across the U.S., weaving north and south while tacking west. Includes several works by SIA General Tools Award recipient Jet Lowe. Ladd sheds light not only on this remarkable archive but on the proliferate meanings that can be shaped from its images. Rev.: *The New Yorker*, Nov. 18, 2021.
- ◆ David Rooney. **About Time: A History of Civilization in Twelve Clocks**. W. W. Norton, 2021. 288 pp., illus. A history of civilization through the stories of twelve clocks—how time has been imagined, politicized, and weaponized over the centuries. Examples span from the unveiling of al-Jazari’s castle clock in 1206, in present-day Turkey, to the burial of a plutonium clock now sealed beneath a public park in Osaka, where it will keep time for 5,000 years. One of *Smithsonian Magazine*’s “Ten Best History Books of 2021.”
- ◆ **TICCIH Bulletin 95** (1st Quarter, 2022) includes Miles Ogletorpe, President’s column on *Reflecting on 2021—From Covid to COP26*; Paul Smith, *The Resurgence of Chatham*

*Dockyard*—review of *Chatham Historic Dockyard, World Power to Resurgence*, by Neil Cossons, ed.; updates from around the world including Bernard Bay, *Building Tomorrow’s Archives Today*; Roman Hillmann, *Industrial Heritage and Climate Change*; Philip Bennett, *Conservation Management of Ryde Water Pumping Station*; Guilherme Pinheiro Pozzer, *Memory and Industrial Heritage*; Andrey Burganov, Anastasiya Biryukova, and Nadezhda Solonina, *Sysert Ironworks*; Alain Gelly, *Montreal Congress 2022: Industrial Heritage in Canada (Part 1)*; TICCIH news: Keith Baker, *Australia’s National Scientific Committee on Industrial Heritage*; and Enikö Charlotte Zöller, *Internship at TICCIH Austria*; UNESCO World Heritage updates: Dennis Rodwell, *Urban Landscape and the Delisting of Liverpool—Maritime Mercantile City*; and Hassan Bazazzadeh, Mohsen Ghomeshi, and Asma Mehan, *The Trans-Iranian Railway*; Industrial Museums reports: Allan Winn, *Repurposing Historic Aviation Buildings*; and Michał Bogusławski and Marek Mroziwicz, *Warsaw’s Norblin Factory*; Conference Report: Anders Houltz, *Industrial Heritage Culture in the 2020s*; and Book Reviews: Massimo Preite, *From Cottonmill to Cottonopolis: How Textile Factories Shape Urban Form*; and Betsy Fahlman [SIA], *Railroads, a History in Drawings*.

#### IRON & STEEL

- ◆ Pat Farabaugh. **Disastrous Floods and the Demise of Steel in Johnstown**. The History Pr., 2021. 192 pp., photos. \$21.99. Three major flooding events over the late-19th to mid-20th c. left Johnstown, Pa. with a failing steel industry in ruins. Tells the history of Johnstown’s great floods—one of which (1936) was the impetus for groundbreaking federal and local flood control measures—and the effects on its economic lifeblood.
- ◆ Robert Gordon [SIA]. **Transfer of Blast-Furnace Finery-Forge Technology to New England**. *Historical Metallurgy* 53, no. 2 (2019): 76–83. Open access: [hmsjournal.org/index.php/home/article/view/5](http://hmsjournal.org/index.php/home/article/view/5). John Winthrop Jr. brought industrial-scale ironmaking to Mass. for the London-based Undertakers of Ironworks in New England beginning with a blast furnace blown-in at Braintree in 1645 followed by a nearby finery forge. Within a year, a new location for the furnace was

sought and the Braintree furnace abandoned for reasons never satisfactorily explained. Archeological evidence now shows that inadequate, unreliable waterpower caused the failure at Braintree; locates the site of the finery forge; and demonstrates that a blast furnace built near the forge would have succeeded. Winthrop's preoccupation with alchemy and pansophy contributed to the failure of the Braintree furnace. The resulting loss of the Undertakers' capital left the replacement works at Saugus burdened with debt. Winthrop's second blast-furnace finery-forge project of 1657 made iron but not profits for the New Haven Colony. Only in the mid-18th c. was this technique successfully revived in New England.

## MINES & MINING

- ◆ Elizabeth Miller. **A Tiny Town's Mining Past Brings Movies, Tourists and Environmental Problems.** *WashPost* (Jan. 9, 2022). [www.washingtonpost.com](http://www.washingtonpost.com). The town of Madrid, N.M. was a booming coal-mining town from the 1850s into the 1950s. In 1977, much of the community was listed on the National Register of Historic Places as a well-preserved example of a company-owned town. Today the town struggles to balance the concerns of historic preservation among residents, tourists, and the film industry while managing environmental problems from the abandoned mines.

## RAILROADS

- ◆ John Freeman Gill. **In the Bronx, a Push to Save Cass Gilbert's Train Stations.** *NYT* (Jan. 28, 2022). [www.nytimes.com](http://www.nytimes.com). Four stations of the former New York, New Haven & Hartford RR designed by the famous architect lie abandoned in the Bronx. Two may be saved for re-use.

### CONTRIBUTORS TO THIS ISSUE

Marc Belanger, Reno, Nev.; Diana Bouchard, Montreal, Que.; James Bouchard, Montreal, Que.; Rebecca Burrow, Portland, Ore.; Arlene Collins, Calumet, Mich.; Bob Frame, St. Paul, Minn.; Andrew Gustafson, Brooklyn, N.Y.; Mary Habstritt, New York, N.Y.; Nancy Hachtel, Willoughby, Ohio; Patrick Harshbarger, Wilmington, Del.; Neill Herring, Jesup, Ga.; Matthew Kierstead, Marlboro, N.Y.; Arron Kotlensky, Pittsburgh, Pa.; Joe Marasco, Buffalo, N.Y.; Guy Marentette, Cuyahoga Falls, Ohio; Christopher Marston, Silver Spring, Md.; John Mayer, Amesbury, Mass.; Ron Petrie, Lakewood, Ohio; Carol Poh, Cleveland, Ohio; John Reap, Sun City West, Ariz.; Joseph Rennie, Buffalo, N.Y.; Daniel Schneider, Lake Linden, Mich.; Mary Starbuck, Akron, Ohio; Saul Tannenbaum, Cambridge, Mass.; Robert M. Vogel, Washington, D.C.; Steven Walton, Hancock, Mich.; Suzanne Wray, New York, N.Y.; Helena Wright, Washington, D.C.

*With Thanks.*

- ◆ Frank Herfort. **The Stunning Grandeur of Soviet-Era Metros.** *NYT* (Nov. 1, 2021). [www.nytimes.com](http://www.nytimes.com). This photoessay on stations of the former Soviet subways is the product of visits to 770 stations in 19 cities between 2014 and 2020. Part of a pandemic travel series (World Through a Lens) to transport readers via photos to compelling places.
- ◆ Jodi Hilton. **Inside the Struggle to Save Bulgaria's Last Narrow-Gauge Railroad.** *NYT* (Nov. 15, 2021; updated Dec. 31, 2021). [www.nytimes.com](http://www.nytimes.com). Another essay in the World Through a Lens series, shows the present-day Rhodope Narrow-Gauge Ry.—and the rural lifestyle which it supports with 27 stations across Bulgaria's Rhodope mountain range. Built in the first half of the 20th c., when many narrow-gauge RRs crossed the country, it is the last remaining. The nonprofit group *Za Tesnolineikata* ("For the Narrow Gauge") aims to help save it.
- ◆ Philip Mark Plotch. **Last Subway: The Long Wait for the Next Train in New York City.** Cornell Univ. Pr., 2020. 360 pp. \$29.95. This story behind NYC's struggle to build a Second Ave. subway reveals how uninformed and self-serving politicians made false promises to the public but also analyzes how governments can overcome political gridlock to build grand projects. For a preview and description of sources see "The Last Subway" in *New York Archives Magazine*, vol. 21, no. 3 (Winter 2022), pp.12–17, [www.nysarchivestrust.org/new-york-archives-magazine](http://www.nysarchivestrust.org/new-york-archives-magazine).
- ◆ James Richmond. **The Saratoga Electric Railway's Battle with the D&H.** *New York Almanack* (Jan. 21, 2022). [www.newyorkalmanack.com](http://www.newyorkalmanack.com). A trolley line was intended to connect Saratoga Springs, N.Y. with local tourist attractions and continue on to Ballston Spa, but they ran into problems where their route crossed the Delaware and Hudson RR.
- ◆ Walter Simpson. **Turbine Power: A Bold Railroading Technology and Its Fate.** Kalmbach Pub. Co., 2020. 128 pp., photos. \$20.75. Covers steam and gas turbine locomotives and trains, how they functioned, and the technology used from 1939 to 2003. For the first time in one volume, all types of turbine-powered locomotives and trains are explored; includes photos and a thorough reading and resources list.

## AGRICULTURE & FOOD PROCESSING

- ◆ Lynda Bryan. **Mott's Apple Empire Began in Saratoga County in 1842.** *New York Almanack* (Feb. 17, 2022). [www.newyorkalmanack.com](http://www.newyorkalmanack.com). The humble beginnings of Mott's apple-processing empire on a family farm in Halfmoon, N.Y.
- ◆ Linda Gross. **Catch Up, Ketchup!** *Hagley Library Collections and Research News* (Jan. 24, 2022). [www.hagley.org/librarynews/catch-ketchup](http://www.hagley.org/librarynews/catch-ketchup). Pandemic-related changes in dining behaviors caused a shortage of ketchup packets in early 2021. The article offers a short history of Heinz and ketchup production, including images of historic documents, patent for the condiment packet, and a new packet-squeezing gadget (sold out in 2021).
- ◆ Eric Roper. **Why Did Minneapolis' Famous Flour Boom Go Bust?** *Star Tribune* (Jan. 14, 2022). [www.startribune.com](http://www.startribune.com). Part of the "Curious Minnesota" series, explores the reasons why flour milling declined in Minneapolis after 50 years as the "flour milling capital of the world." Plenty of historical



details, including commentary from Bob Frame [SIA], and archival photos.

## BUILDINGS & STRUCTURES

- ◆ Marc Gordon. **The Distinctive Cast Iron Architecture of NYC's SoHo.** *Untapped New York* (Nov. 2, 2021). [untappedcities.com](http://untappedcities.com). History of cast-iron building facades in the city where it began and the neighborhood with the largest concentration of cast-iron buildings in the world.
- ◆ David S. Rotenstein [SIA]. **The Big Fish and a Big Building: A Historic Pittsburgh Building's Obituary.** *The Metropole* (Dec. 20, 2021). [themetropole.blog/2021/12/20](http://themetropole.blog/2021/12/20). Completed in 1930, the Federal Cold Storage Co. building in Pittsburgh functioned as a warehouse for incoming produce. In 2014 it was listed in the National Register of Historic Places as a contributing building in the Strip District Historic District, the area that was once the city's rail (and later truck) terminal market for fruits and vegetables. The building and its large, illuminated fish sign were a popular and well-loved visual landmark, yet in the summer of 2021, crews began demolishing the historic building. Excellent read about the limitations of local preservation policy failures in saving a prominent historic industrial building.
- ◆ Jesse McKinley. **Eyesore or Monument? Preservationists Fight to Save a Grain Elevator in Buffalo.** *NYT* (Jan. 22, 2022). [www.nytimes.com](http://www.nytimes.com). The Great Northern grain elevator in Buffalo, N.Y., built in 1897, is possibly the last "brick-box" grain elevator in the world. After its heyday in the early 1900s, it slowly fell out of use, and shut down in 1981. It was recognized as a local landmark in 1990, but now shows signs of deterioration and faces a battle between redevelopment and demolition. See article in this issue.

## BRIDGES

- ◆ Lee Rainey. **East Broad Top Bridges and Trestles, Part Two.** *TT* Vol. 33, No. 3 (Fall 2021), pp. 8–16. Second part of an overview of all bridges and trestles along Pa.'s East Broad Top RR and its branches during common-carrier days. This part continues along the main line from Rockhill to Robertsdale and Alvan, with an accompanying map showing all of the locations discussed. Includes many photos and references.
- ◆ Jeffrey I. Richman. **Building the Brooklyn Bridge, 1869–1883: An Illustrated History, with Images in 3D.** New York: Bauer and Dean, 2021. 336 pp., illus. \$55. This reader-friendly narrative tells the compelling story of constructing what was then the largest suspension bridge ever built. Historic images, many never before published on the printed page, include engineering drawings, photographs, woodcuts, cabinet cards, and colored lithographs. The author commissioned several anaglyphs—3D images generated from stereographs—to allow readers with 3D glasses to follow the bridge's progression as the public did over 140 years ago by viewing stereographs from the comfort of their Victorian parlors.

## POWER GENERATION

- ◆ **Windmillers' Gazette.** Vol. 40, No. 3 (Autumn 2021) includes Christopher Gillis, *Stephen B. Church and His Handsome Windmill Towers*, and Jim Collums *Donates Windmills to Longhorn Museum*; T. Lindsay Baker, *The First International Windmillers' Trade Fair, 1989*; Etienne Rogier, *The Halladay Standard Power Windmill at Fort-Dauphin, Madagascar, 1890–1907*; Christopher Gillis, *Modern Windmill Water Storage Systems*; and various news and notes. Avail: \$20/yr., published quarterly. Christopher Gillis, Editor, P.O. Box 788, Buckeystown, MD, 21717; [www.windmillersgazette.org](http://www.windmillersgazette.org).

## MISC. INDUSTRIES

- ◆ Peter Finn. **Rensselaer County Industrialist Albert Fox: A Short Bio.** *New York Almanack* (Nov. 10, 2021). [www.newyorkalmanack.com](http://www.newyorkalmanack.com). Story of Albert Fox, who led the Rensselaer Glass Works with his brother beginning in 1839, a time when upstate cities like Albany and Troy and other communities were booming and in need of window glass.
- ◆ Todd C. Frankel. **A Closing Factory, a Booming Economy and a Town's Search for Identity.** *WashPost* (Feb. 3, 2022). The KME fire truck factory in Nesquehoning, Pa. (originally planned as a tour stop, Lehigh Valley Conference 2021, but canceled prior to the event) shut down after 75 years of production. Also known as Kovatch Mobile Equipment, the company got its start when Sonny Kovatch opened a small garage in 1946. Kovatch grew KME into the country's largest private manufacturer of fire apparatus. The company sold every type of pumper, engine, and ladder truck. KME was sold in 2016, and the new owners went public a few months later. KME is now just one of six fire truck brands owned by a single company called REV Group, which closed the Nesquehoning plant and shifted production to other states.

## ABBREVIATIONS

NYT	= <i>New York Times</i>
OMN	= <i>Old Mill News</i> , published by the Society for the Preservation of Old Mills (SPOOM)
SCA	= Society for Commercial Archeology
TICCIH	= <i>The International Committee for the Conservation of the Industrial Heritage</i> , <a href="http://ticcih.org">ticcih.org</a>
TT	= <i>Timber Transfer</i> , published by Friends of the East Broad Top. Avail. with membership. \$30/yr. <a href="http://www.febt.org">www.febt.org</a>
WashPost	= <i>Washington Post</i>
WSJ	= <i>Wall Street Journal</i>

**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](mailto:sianeditor@siahq.org). ■

## NOTES & QUERIES

**Announcing the 2022 Leicester B. Holland Prize: A Single-Sheet Measured Drawing Competition.** The Holland Prize is an annual competition, open to both students and professionals, that recognizes the best single-sheet measured drawing of an historic building, site, or structure prepared to Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER) or Historic American Landscapes Survey (HALS) standards for inclusion in the HABS/HAER/HALS Collection at the Library of Congress. The prize honors Leicester B. Holland (1882–1952), FAIA, chairman of the American Institute of Architects (AIA) Committee on Historic Buildings, head of the Fine Arts Division of the Library of Congress, first curator of the HABS collection, co-founder of the HABS program in the 1930s, and the first chair of the HABS Advisory Board. The winner receives a \$1,500 cash prize and a certificate of recognition. The Library of Congress will announce the winning drawing. Merit awards may also be given. Deadlines: Sept. 1, submit entry form by email; Oct. 1, postmark deadline for submission of completed entries. For more info: <https://www.nps.gov/hdp/competitions/holland.htm>.

**Call for Nominations: Association for Preservation Technology (APT)—David Fischetti Award.** Each year, the APT presents the Fischetti Award for an outstanding article that advances the field of preservation/conservation engineering. Articles submitted for award consideration may be project-related or based on research. Articles must have been previously published in a peer-reviewed journal or similar publication and should cover any of the following topics: history of engineering design, methods, or systems (structural, building enclosure, mechanical, electrical, fire protection, vertical transportation, etc.); application of analytic methods with proper judgement in analyzing archaic systems; re-evaluation and comparative analyses of historic analytic methods; assessment of historic materials and systems; integration of modern systems with historic and archaic systems; innovative methods of repair of historic systems; incorporation of engineering judgment and simplified methods. The award is sponsored by APT's Preservation Engineering Technical Committee (PETC). Please visit the PETC website for details at [www.apti.org/david-fischetti-award](http://www.apti.org/david-fischetti-award). Submissions should be sent to [petc@apti.org](mailto:petc@apti.org), and the deadline is Fri., May 27, 2022.

**Cinecraft Film Collection.** Over three years, the Hagley Museum & Library (Wilmington, Del.) has made significant progress working to preserve the Cinécraft Productions film collection. Cinecraft specialized in commercial productions for business, industry, trade organizations, and government agencies and social service organizations [Those of us of a certain age probably remember viewing these films in grade school or as “infomercials”]. Cinecraft rightfully claimed itself the “country’s longest-standing corporate film & video production house.” As of Jan. 19, Hagley’s audiovisual

digitization archivist has digitized and cataloged over 350 films. In addition, over 400 film scripts are now online. You can explore all of this content in the Cinecraft Productions collection in the Hagley Digital Archives (<https://digital.hagley.org/2019227>). In 2019, Hagley launched an oral history project (<https://digital.hagley.org/islandora/object/islandora%3A2659162>) that interviewed Cinecraft staff and family members, building on interviews conducted in 1999 with Paul Culley, who headed the company from 1970 to 1986 and the younger brother of Cinecraft founder Ray Culley, and Jim Haviland, an executive producer during the height of the Cinecraft film era of the late 1930s to the 1970s.—[hagley.org](http://hagley.org), Jan. 19, 2022 ■

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## IA EXHIBITS

**Coal + Ice** will be on display Mar. 15–Apr. 22 at the REACH, a new multi-disciplinary arts event space at the Kennedy Center, Washington, D.C. This documentary photography exhibition brings together the work of over 50 photographers and video artists from around the world to visualize the climate crisis in a large-scale immersive experience. The visitor explores the relationship between coal and ice as they go deeper into the immersive space and a story of the climate crisis unfolds. The imagery employed, including historical and contemporary portraits of coal miners, is drawn from over a century’s worth of diverse materials, from glass-plate negatives to smartphone videos. Not quite IA, but includes archival, documentary coal mining materials of IA interest. Info: <https://www.kennedy-center.org/whats-on/festivals-series/coalandice/>.

**The Works of a Mechanical Genius: The Legacy of John Fritz** is now on display through Oct. 16, 2022 at the National Museum of Industrial History, Bethlehem, Pa. (Annual Conference sponsor and tour site, 2021). The exhibit explores the life and legacy of an innovative ironmaster who has been touted as a founder of the American steel industry, alongside names like Andrew Carnegie. Fritz, Bethlehem’s General Superintendent and Chief Engineer, built and oversaw the operations at the Bethlehem Iron Co. from 1860 to 1893. Explore the early decades of Bethlehem Iron, parent company to the Bethlehem Steel Corp., and examine Fritz’ impact on work, technology, and defense. Showcasing rarely seen special collections pertaining to the life of this trailblazing industrial pioneer, the exhibit fosters exploration of the process of innovation and the role of the iron and steel industry in the formation of our nation and cultural identity. Info: [www.nmih.org](http://www.nmih.org). ■

# SIA Annual Conference Preview Portland, Ore., June 9–12, 2022

**I**t has been a strange couple of years, planning the 50th SIA Annual Conference in Portland, Ore. Though delayed by the pandemic, and still slightly modified, the planning committee is looking forward to welcoming you to the Pacific Northwest. (While you may have seen some worrying coverage of Portland in the news, rumors of our demise have been greatly exaggerated, and the city remains a vibrant and unique place to visit and live.) For the conference, we have a number of fascinating tours confirmed, and it seems that the country is reopening just in time for you to see them!

A couple of our Friday tours have limited attendance, so you'll want to get your registration in as soon as possible. Limited tours include a guided tour of the first scenic highway in the country, the Historic Columbia River Highway, and a tour of early water-powered industries at Willamette Falls and Lake Oswego. The Willamette Falls Locks, built in 1873, were the first significant navigational improvement west of the Continental Divide and the 1867 Oswego Furnace was the first iron furnace on the Pacific Coast.

Larger capacity tours will include a visit to Bonneville Dam, which was the largest water impoundment project in the country at the time of its construction in the 1930s. The U.S. Army Corps of Engineers is looking forward to talking to us about the history of the Columbia River site. Another tour will head to the Willamette Valley wine country and the city of McMinnville, where you can see the legendary Spruce Goose in its home at the Evergreen Air and Space Museum.

Pre-conference tours include a bus ride to the Powerland Heritage Park; a must-see stop for any fan of early 20th-c. technology. This collective of museums includes the Antique Caterpillar Machinery Museum, the Oregon Electric Railway Museum, the Pacific Northwest Logging Museum, and the Western Steam Fiends Assn., among many others. Post-conference tours will include a guided tour of the bridges of Portland, with the author of the authoritative book on the subject, Sharon Wood Wortman.

Our conference hotel is The Benson, a Baroque Revival-Style historic hotel in downtown Portland. The opening reception will take place in the former restaurant

of the 1913 hotel, complete with “hidden” speakeasy and replica lighting developed with historical accuracy in mind. The Friday evening activity, in true Portland fashion, will be a pub crawl, with meet-ups organized for Special Interest Groups (SIG) such as the Iron and Steel SIG. (If you have a SIG you'd like to meet up with, please reach out and we'll find a location for you.)

The optional banquet on Saturday will take place at McMenamins Edgefield Resort, a short 20-min. drive out towards the Columbia River Gorge. The McMenamins brothers are known for their restorations of interesting historic buildings as hotels and restaurants, and Edgefield is no exception. The property spent seven decades as the county poor farm, before being rescued from demolition by the local historical society and reconstructed into a pub, winery, brewery, distillery, hotel, golf course, and spa by McMenamins. You won't want to miss it.

While you're here, we encourage you to explore Oregon and the Pacific Northwest more fully. Between the Willamette Valley and its agricultural richness, the Pacific Coast and its dramatic scenery, and the Cascade Mountains full of potential adventures, there is plenty to see and do within a couple of hours of Portland. Make your plans to join us this June! We hope to see you in Portland!

*Rebecca Burrow and the  
SIA Portland Conference Committee*



*Aerial view of downtown Portland, featuring many of the historic Willamette River bridges.*

## DEATH OF AN ARMY TERMINAL (continued from page 3)

companies, called Lincoln Logistics Bayonne, plans that involved removing many of these structures. MOTBY's famous water tower came down first in 2018 ([www.youtube.com](http://www.youtube.com), Bayonne water tower implosion), but the next major step was on Aug. 8, 2021 to implode the two six-story warehouses on the southwest side of the peninsula, Buildings 32 and 42 (see ABC7 New York's video: [abc7ny.com](http://abc7ny.com)). In addition to the shipping hub, there will also be parking for a new ferry terminal being constructed by the city. Many of the warehouses remain, especially the distinctive barrel-arch roof storehouses, but their future is uncertain. It is a shame that these buildings could not be repurposed for industrial uses, but instead will be replaced with a logistics hub choking roads with last-mile e-commerce truck deliveries. In Nov.

2021, Lincoln Equities flipped the property to an unknown buyer for an undisclosed price.

Too often, the entire military history of the harbor gets grafted onto the Brooklyn Army Terminal (which only handled about 20% of the harbor's military shipments in World War II) and the Brooklyn Navy Yard (one of 40 shipyards in the harbor during the war), as they are both, thankfully, still standing. While a piece of this history is now gone, it's important to remember the contributions of this site to America's war effort, and of the hundreds of thousands of uniformed and civilian workers that made it run.

Andrew Gustafson



Buildings 32 and 42, now demolished, March 2016.



Bayonne Naval Supply Depot, July 1953.

## IA ON THE WEB

**Tide Mill Database** (<https://www.tidemillinstitute.org/tmi-database/>). The Tide Mill Institute has launched its database, which currently includes locations and detailed data for more than 600 tide mill sites in North America, Western Europe, and Australia. The database is easy to browse, with most sites indicated by markers on a Google map of the world. The viewer can zoom in and out and choose a map or a satellite view. Clicking a site marker displays available text information, photos, and links to documents and related external materials. Sites can also be searched by name. View the introductory video on YouTube: [www.youtube.com/watch?v=V8fzkGKkuC8](http://www.youtube.com/watch?v=V8fzkGKkuC8).

**Wincharger.com** provides a virtual meeting place for those interested in the history and preservation of wind-powered battery generators, known as "wind-chargers." The site is mostly focused on the generators marketed under the brand name "Wincharger," manufactured by the Aber Propeller Co. (1927–1933) and the Wincharger Corp. (1934–1982) of Sioux City, Iowa. Includes hundreds of photos, historical articles and promotional materials, restoration resources, and a members' forum. Contact: Mike Werst, [mike@wincharger.com](mailto:mike@wincharger.com), or 512-589-2996.

**Windsor Street Gasholders** ([www.nationalgrid.com/uk/gas-transmission/land-and-assets/windsor-street-gasholders](http://www.nationalgrid.com/uk/gas-transmission/land-and-assets/windsor-street-gasholders)). National Grid (U.K.) has an ongoing program to dismantle its unused gasholders. The three gasholders at the Windsor Street site in Birmingham date from 1885, but have not been in use since 2012. Dismantling work is expected to be completed in 2022. This site includes an image gallery, and links to heritage-related resources, such as brochures, oral histories, educational materials, and more.

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: [sianeditor@siahq.org](mailto:sianeditor@siahq.org) ■

# William G. Hachtel, 1929–2021

Longtime SIA member Bill Hachtel, of Willoughby, Ohio, lost his battle with several long-term health issues on Aug. 14, 2021. He was born on Oct. 3, 1929 in Cleveland, and raised there, son of Raymond and Nora (Hefron) Hachtel. Bill graduated from Columbia Military Academy (Columbia, Tenn.) and Miami University (Oxford, Ohio), and served as a Lieutenant (jg) in the U.S. Navy during the Korean Conflict. He is survived by his wife of 62 years, Nancy (Raufman) Hachtel, daughters Katherine and Gretchen, one grandson, and a sister. He and Nancy were longtime residents of Waite Hill, Ohio, where he was buried in Waite Hill Cemetery.

Bill assumed control of the family business, Wahl Moving and Transfer Co., which was founded in 1897. One of the company's earliest jobs, under his grandfather's supervision, was erecting a 52-ft. granite obelisk on the Rockefeller family memorial in Cleveland's Lake View Cemetery. Wahl moved equipment for testing jet and rocket engines for NASA's Lewis Flight Propulsion Laboratory, as well as shipping astronomical telescopes, precision instruments, and large machine tools for the Warner & Swasey Co. General Electric was another client, operating its lamp division at NELA Park and support activities at other locations in town. Bill's tenure at Wahl spanned the de-industrialization of Cleveland, moving production machinery of machine tool and fastener plants to the South, and to ports for shipment elsewhere. He recalled taking flatbed loads to towns on the Texas border and waiting there for rigging equipment and the trucks of Mexican haulers to arrive. Eventually, there was little left to move, and non-union firms competed for the remainder under a system that no longer required hard-won authority rights to serve specific routes and markets. Wahl closed down as a union carrier in 1994, then continued with non-union pickup crews for another three years at Bill's insistence on the company marking a century in the business.

Bill and Nancy had first heard of the SIA's existence several years prior to joining while the Cleveland Conference (1986) was in process. Thereafter, they attended all of the conferences, most of the fall tours, and Northern Ohio Chapter activities for more than two decades. In addition, they participated in several study tours, including England-Wales (1993); the Panama Canal (1996), led by the one and only David Shayt; Scotland (1997); China (1998), organized by the Northern Ohio Chapter's Walter Sheppe, who was immensely impressed by a previous visit; and the Ruhr Valley (2001), coordinated by Pat Martin [SIA]. After the Mohawk Valley Fall Tour (2011), Bill expressed regret that



Nancy Hachtel

Bill Hachtel.

his health problems ruled out further expeditions. Still, that didn't diminish his and Nancy's interest in the national organization and the Northern Ohio Chapter, and in the friendships they'd made along the way.

Although I'd previously seen Bill and Nan among the group at several conferences, we hadn't had an extended discussion until waiting for one of the school buses during the first Lehigh Valley Fall Tour (1988) organized by the late Lance Metz. Bill loved to talk about his business experiences, and even more so about his penchant for collecting machinery, particularly items made in Ohio, always in an educative manner. At that point, he'd already disposed of a large collection of single-

cylinder "hit and miss" engines, but remained entranced by the products and history of the Foos Gas Engine Co. (Springfield, Ohio). He'd also sold the small fireless steam locomotive previously owned by a factory on the west side of the river. Bill's mother had bought it as a present, so he reciprocated by giving her a fire engine, which she took to local parades. Before the conversation ended, he invited me to stop by on my next trip through Cleveland.

That occurred after flying to the Butte Fall Tour, in 1989. From the Wahl office on the I-90 East frontage road, we drove to a large brick storehouse on Conrail's Collinwood Shops grounds. In addition to early-60s short-nose Kenworth 900 and International RF tractors from the Wahl fleet, the trove included an impressive amount of machine tools and production equipment, much of it made in Cleveland, as were two Towmotor platform-lifts, an evolutionary step between electric cart-trains and forklifts. Most of this was obtained at scrap prices, or gratis, for hauling it away. Then I followed the map to the farmhouse in Waite Hill. Treasures in the barn included a Model A Ford roadster and an unfinished Model T speedster with a boat-tailed body. A group of metal sculptures displayed in the yard were made by Bill in his workshop with a collection of belt-driven tools and welding equipment. An industrial lighting freak like myself, he'd collected an array of what he called "porcelain-shade" fixtures, designed at GE's NELA Park in Cleveland and manufactured under license by a number of companies for effectively lighting factories and warehouses. He'd also managed to acquire switchboard meters and several Maxim-Weston bulbs, an alternative to Edison's patent. On other visits, we took driving tours of sites on Cleveland's east and west sides.

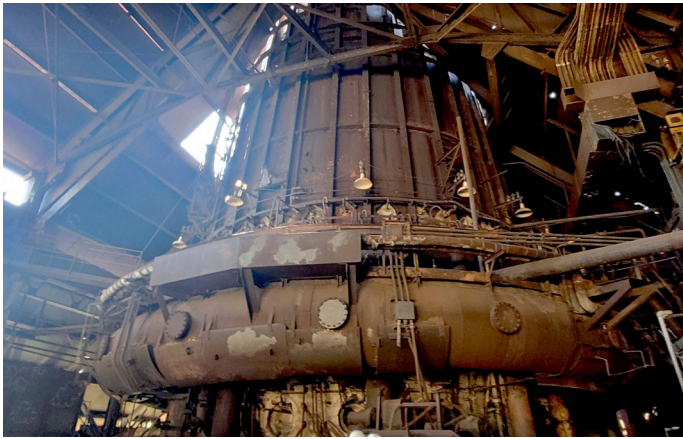
As circumstances dictated a long process of downsizing his treasures, Bill compensated by learning to collect bricks and joined the Brick Collectors of America, which is active in

*(continued on page 15)*

## CHAPTER NEWS

The **Northern Ohio Chapter** (NOCSIA) held its regional Fall Tour in Pittsburgh, Pa., from Oct. 1–3, organized jointly with two other like-minded organizations. More than 50 participants came from Ohio, Pa., Mich., N.Y., and Va.

Friday began with a guided tour of Carrie Furnaces #6 and #7, remnants of the legendary U.S. Steel Homestead Works. Located in Rankin and Swissvale, about seven miles southeast of Pittsburgh, the furnaces are now part of the Rivers of Steel National Heritage Area and managed by Rivers of Steel Heritage Corp. ([riversofsteel.com](http://riversofsteel.com)). Rivers of Steel arose in 1988 from a group of concerned citizens. After Pittsburgh's steel industry collapsed in the 1980s, the group was determined to preserve important parts of the region's history and culture that were in danger of being erased. Today, the organization provides interpretation of the historic steel industry, as well as art-making, community gathering, and special events such as weddings or drive-in movies.



Guy Marentette

*Interior view during the Carrie Furnace tour.*



Guy Marentette

*Carrie Furnace.*

Our tour guide was Rivers of Steel volunteer Bill O'Rourke, a retired Alcoa Vice President, who had been responsible for environmental, sustainability, and health and safety issues. He helped lead Alcoa to a culture of record-breaking safety, from plants in the U.S. to challenging overseas locations like Russia.

Towering 92 ft. over the Monongahela River (the Mon), constructed of 2.5-in.-thick steel plate and lined with refractory brick, Carrie Furnaces #6 and #7 are rare examples of pre-World War II iron-making technology. They are the only remaining non-operative blast furnaces in the region. The plant produced iron, not steel, so Bill began by explaining the difference. Iron has a higher carbon content than steel—greater than 2% vs. less than 1%. Steel also contains other metals depending on its use.

The tour proceeded through the facility, following the process order. Bill explained how the various ingredients were sorted and combined in enormous hoppers and furnaces to produce the final product. By “final” Bill further explained that most of the iron produced at Carrie was sent across the Mon to a steel plant for further processing. Originally, it was sent as pig-iron ingots, but that was later improved by sending the molten iron across in special ladles, thus saving the energy to remelt it. It took a special bridge—the Hot Metal Bridge—to accomplish this.

The plant has a legacy of labor history as well. The 1892 Homestead strike and the ensuing bloody battle instigated by the steel plant's management were a transformational moment in U.S. history. Skilled workers at the Homestead steel mills were members of the Amalgamated Association of Iron and Steel Workers who had bargained exceptionally good wages and work rules. Homestead's management, with millionaire Andrew Carnegie as owner and Henry Frick as



Doug Logan

*The Northern Ohio Chapter group gathers on the riverboat.*

chairman, was determined to reduce costs by breaking the union, even though the company (Carnegie Steel, predecessor of U.S. Steel) made record profits of \$4.5 million before the 1892 confrontation.

After lunch in McKeesport, participants visited several historic industrial sites in the Mon Valley, including a 1906 Ry. roundhouse, a never-used floodgate designed to protect the Westinghouse factory complex along Turtle Creek, and the 1890s Westinghouse headquarters “castle” in Wilmerding. On Friday evening, historian Todd Wilson, co-author of *Pittsburgh’s Bridges* (Arcadia, 2015), delivered a presentation.

The highlight of the weekend was Saturday’s all-day riverboat cruise on the Mon, which included two transits through the Braddock Lock, as well as close inspections of historic bridges and industrial sites. On Saturday evening, John Oyler, engineering professor from the Univ. of Pittsburgh, delivered a presentation on the history of lock and dam projects on the Mon, Allegheny, and Ohio rivers. On Sunday morning, participants chose between a guided walk on municipal stairways north of the Allegheny, or a bike ride along riverside trails culminating with a trip on the Duquesne Incline to the top of Mount Washington.

Mary Starbuck, Ron Petrie, et al.

On Nov. 6, **Roebling Chapter** members met at the historic Mohegan Granite Quarry in Yorktown Heights, N.Y. for a tour led by chapter member Matt Kierstead [SIA]. The quarry, which operated from the 1890s to World War II, was the source of distinctive “Mohegan Gold” granite, a warm-toned stone used for a variety of local and regional buildings and monuments. The quarry’s biggest commissions were several multi-million dollar mid-1920s stone orders for the exterior of the Episcopal Cathedral of St. John the Divine in Morningside Heights in Manhattan. To fill those orders, the quarry completely modernized its facilities and operations with new

electric and compressed air equipment. The tour included interpretation of the quarry’s geology, drilling and blasting, waste rock disposal, and the remains of the blacksmith shop, hoisting derricks, 1,000-ft.-long inclined plane, and cutting and finishing sheds. For more information on the Mohegan Granite Quarry, you can view Matt’s new quarry history trail signs at [www.milestoneheritage.com](http://www.milestoneheritage.com).

Matthew Kierstead



Matthew Kierstead

### Roebling Chapter tour group at the Mohegan Granite Quarry.

The **Southern New England Chapter** held its 2021 Annual Meeting via Zoom on Nov. 17. The chapter meeting was preceded by a presentation by Tim Richards, “Re-Discovering an 18th–19th Century Tide Mill on Cape Cod.” He discussed the use of tidal power for milling operations in 17th–19th c. New England, described a largely forgotten tidal grist mill that operated in Truro, Mass., from the late 18th c. to approximately 1860, and looked at the possible re-emergence of commercially viable tidal power today. ■

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## WILLIAM G. HACHTEL (continued from page 13)

Northern Ohio. Bricks are fairly easy to come by, restoration consists of chipping off mortar, and they can be stored outside without objections from the neighbors. Brick collectors research the pressed makers marks, exhibit them at shows, and trade them—the rule is that no money changes hands. SIA events presented opportunities for retired bricks from exotic locales to avoid a fate as landfill by escaping to Ohio.

Health issues didn’t diminish Bill’s inquiring mind. More recently, he and I had spent hours on the phone over the course of several years discussing the meaning of a “German Cross” on a brick marked “UNION,” a query that seemed to lead nowhere among the better-known brickmakers. While it is most readily associated with the Kingdom of Prussia and the German Empire, I was also aware of its employment by the Catholic Church and its lay orders, and its symbolic meaning among firefighters. After additional research, I

found that the “footed cross,” (cross patée), has often been appropriated over time as a commercial trademark, and by military and civilian organizations. In particular, it was adopted by Fifth (V) Corps of the Army of the Potomac during the Civil War (Wiki). We were both intrigued by the possibility that the brick company’s proprietor or financial backer may have served in one of those divisions.

I’ll certainly miss Bill, as will other members whom he and Nan befriended on Society activities.

Memorial contributions may be made to the donor’s choice.

For members who may wish to contact Nancy, this is her present address: Mrs. Nancy Hachtel, 36500 Euclid Ave., North A-551, Willoughby, OH 44090.

John Reap

# **SOCIETY FOR INDUSTRIAL ARCHEOLOGY**

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## CALENDAR

Please be advised to confirm all events and dates due to the coronavirus pandemic. All information was current, as best as could be determined, at the time of publication.

### 2022

**Apr. 27–May 1:** Society for Architectural Historians Annual International Conference, Pittsburgh, Pa. Info: [www.sah.org](http://www.sah.org).

**May 30–June 3:** World Canals Conference 2022, Reshaping Landscapes: Waterways in Transition, Leipzig, Germany. Postponed from 2020. Pre- and post-conference tours. Info: [wccleipzig2022.com](http://wccleipzig2022.com).

**June 2–4:** Construction History Society of America 7th Biennial on Construction History: Quarrying History, Kennesaw State Univ., Ga. Postponed from 2020/2021. Info: [www.constructionhistorysociety.org](http://www.constructionhistorysociety.org).

**June 9–12: SIA 50th ANNUAL CONFERENCE, PORTLAND, ORE.** Info: [www.sia-web.org](http://www.sia-web.org). See preview article in this issue.

**June 17–19:** Society for Commercial Archeology Summer Tour: NYC, The Golden Age of Air Travel, New York, N.Y. Info: [sca-roadside.org](http://sca-roadside.org).

**June 23–26:** Mining History Assn. Annual Conference, Birmingham, Ala. Info: [www.mininghistoryassociation.org](http://www.mininghistoryassociation.org).

**June 24–25:** The Dublin Seminar for New England Folklife Conference, “Tools and Toolmaking in New Eng-

land,” Deerfield, Mass., and online. Info: [www.historic-deerfield.org/seminars](http://www.historic-deerfield.org/seminars).

**Aug. 28–Sept. 3:** TICCIH International Conference: Industrial Heritage Reloaded. New Territories, Changing Culturescapes, Montréal, Qué. Rescheduled from 2021. Info: [patrimoine.uqam.ca/evenements/ticcih2022/](http://patrimoine.uqam.ca/evenements/ticcih2022/).

**Sept. 22–24:** Preserving the Historic Road International Conference, Advocacy to Action: Meeting the Challenges of the Next Generation, Portland, Ore. Info: <http://historicroads.org>.

**Sept. 28–29:** Big Stuff 2022 Conference, Seixal, Portugal (near Lisbon) and online. Info: <https://sites.google.com/fct.unl.pt/big-stuff-2022/home>.

**Nov. 7–12:** Assoc. for Preservation Technology Annual Conference, Detroit, Mich. Info: [www.aptdetroit2022.org](http://www.aptdetroit2022.org).

### 2023

**Apr. 12–16:** Society of Architectural Historians 76th Annual International Conference, Montréal, Canada, followed by virtual sessions, Sept. 20–22. Info: <https://www.sah.org/2023>. ■