

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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IRON & STEEL MUSEUM ACQUIRES TWO HISTORIC MILL BUILDINGS

The National Iron & Steel Heritage Museum (NISHM) announced the acquisition in late 2016 of two historic mill buildings, known as the 120-in. rolling mill and the motor house, which were used in the former Lukens Steel Co. in Coatesville, Pa. (tour site, 2004 SIA Fall Tour, Wilmington, Del.). These two buildings were added as part of the WWII effort, where steel for battleships, aircraft carriers, submarines, destroyers, landing craft, and tank parts was manufactured. Production was halted in 1982 when rolling-mill machinery parts were moved to another plant in Conshohocken, Pa. (the former Alan Wood Steel Plant, now owned and operated by ArcelorMittal). The mill buildings are a gift from ArcelorMittal, the international steel corporation of which Lukens Steel became part in the 2000s.

ArcelorMittal and its predecessor companies have been continuously producing iron and steel in Coatesville since 1810. The town's ferrous-metal story began in that year, when two men purchased a section of Moses Coates's farm that contained a saw mill. They converted the saw mill to an iron works for a new venture called the Brandywine Iron Works & Nail Factory. Soon after, Dr. Charles Lukens married proprietor Isaac Pennock's daughter, Rebecca, and joined his father-in-law in the iron business. Lukens was interested in developing new products, especially iron plate for boilers, a fundamental component of the new steam-engine technology. In 1818 Lukens's mill became the first in America to successfully roll boiler plate. With a strong and growing demand for dependable boiler plate, progress was fast apace in the Lukens mill.

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Sam Radzwilluk/NISHM

The 120-in. mill with Steelworkers' Memorial (World Trade Center steel trident) in foreground.

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- Historic Electric Steel Elevator Razed
- Industrial Sites Considered for the Revised U.S. World Heritage Tentative List

IRON & STEEL MUSEUM (continued from page 1)

The mid-1820s brought changes that altered the company's history but not its course of success. Rebecca Lukens's father died in 1824, and her husband died suddenly the next year. Rebecca agreed to his dying request that she take over the mill. Despite the many challenges of running the business and its demands, along with raising young children, and facing the societal objections to a woman in the iron business, she became a proficient business manager and arguably America's first female industrialist. By 1850, when she stepped down from running the mill, she could state that "our character for making boiler iron stood first in the market." Today the NISHM honors Rebecca's accomplishments each year with the Rebecca Lukens Award, presented to a woman who exhibits the qualities of Rebecca: resilience, leadership, courage, and strategic outlook.

The second half of the 19th century brought continued expansion and new developments to the company, now led by Rebecca's son-in-law, Dr. Charles Huston. The Civil War caused a rapid growth in demand for iron and a record-high volume of production in Coatesville. After the war, the

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

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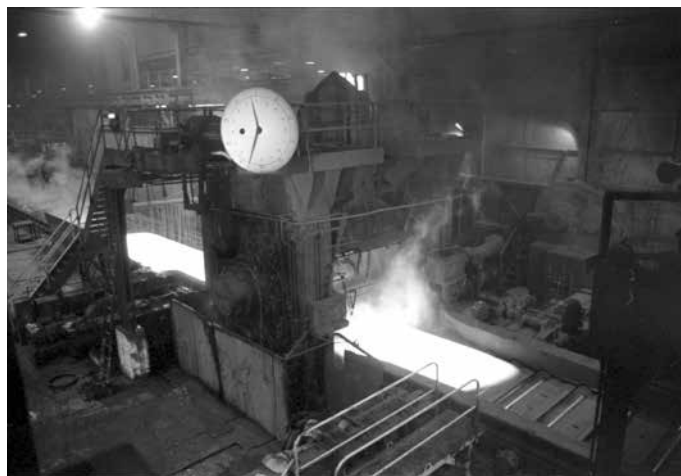
company modernized when it built a new steam-powered mill with wider and longer rolls in 1870 and added a testing machine in 1875. The company began to focus on metallurgical sciences, added another mill, and began the manufacture of spun heads, a circular type of plate used in various tanks and pressure vessels. In 1890 the business was incorporated as Lukens Iron & Steel Company.

Prosperity and innovation continued in the early 20th century. Lukens celebrated its centennial and enjoyed strong market demand for its products as the railroad industry reached a peak of development. The company's innovative extra-wide plates had a significant impact on the railroad industry, and Lukens regained the distinction of manufacturing the widest plates in the world with the 1919 enlargement of a 204-in. mill to 206 in. The 206-in. mill still operates at ArcelorMittal today. The business was reincorporated as Lukens Steel Company, symbolizing an important change throughout American industry—the waning importance of iron, and a new focus on steel.

Lukens navigated the ups and downs of WWI, the Great Depression, and WWII, sometimes with idle facilities and slim profits, but also with new products and management strategies. The company established the first commercial weld shop in the U.S., Lukenweld, and introduced clad plate, a vital product for rust protection in such products as chemical storage tanks. Lukens constructed a 120-in. mill in 1942 as part of its WWII expansion—located in the mill building that now will become a major part of the NISHM exhibits. After the war, Charles L. Huston, Jr. became president and introduced a new operational management style that helped to steer the business through lean post-war years.

Custom steel projects, new materials such as T-1 high-strength alloy, and a transition to electric furnaces characterized the company in the second half of the 20th century. Lukens contributed steel and steel products for notable projects such as aircraft carriers; the U.S.S. *Nautilus*, the first operational nuclear-powered submarine; and the Verrazano Narrows Bridge. Perhaps the most notable project was the

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NISHM collections

The 120-in. mill rolling plate.

Historic Electric Steel Elevator Razed

When Hennepin County (Minneapolis) District Court Judge Ronald L. Abrams issued his final decision and order in the case of the historic Electric Steel Elevator (ESE) on April 26, it was too late. The University of Minnesota had completed razing the complex's 32 steel-plate tanks and headhouse a few days earlier. Thus ended an attempt by the Friends of the Electric Steel Elevator to save the 1901 structure under the Minnesota Environmental Rights Act (MERA). (See *SIAN* Fall 2016.)

Judge Abrams sealed the ESE's fate back in January when he denied the Friends' motion for a temporary restraining order (TRO), which would have prevented demolition while the MERA action proceeded.

During March and April, demolition machinery clawed down the National Register-eligible ESE, the last of three U.S. "classics of the steel era," original all-steel grain elevators with free-standing bins. The other two, the Electric Elevator in Buffalo, N.Y. (1897) and

the Pioneer Steel elevator in Minneapolis (1900), were razed in 1984 and 1995, respectively. Engineer C.A.P. Turner, nationally recognized for his work in reinforced concrete, designed the ESE and may have had a hand in engineering the Pioneer Steel as well.

The University of Minnesota argued that its athletic program needed the historic elevator site to relocate a "sports bubble" facility in order to be Title IX compliant. The court agreed. Without the TRO, the MERA action became a futile legal exercise. Despite having a graduate program in Heritage Conservation and Preservation in its School of Architecture, the university contracted out a modest documentation package termed a Minnesota Historic Property Record (MHPR), similar to HAER documentation. The Minnesota Historical Society's Mill City Museum salvaged a few artifacts.

Bob Frame



Electric Steel Elevator, Apr. 7, 2017. Remaining are a row of Turner's original 80-ft. steel tanks (1901, 125,000 bushels), a row of 65-ft. steel tanks, (1903–1906, 100,000 bushels), and the all-steel headhouse.

Electric Steel Elevator, Apr. 14, 2017. One week later, only a single steel tank and the headhouse remained.

Bob Frame

IRON & STEEL MUSEUM *(continued from page 2)*

late-1960s construction of arched column supports for the new twin towers in the World Trade Center. The steel tridents or “trees” spanned the first nine floors of the towers. Ten of these tridents have since come back home to Coatesville (“World Trade Center Steel Makes a Homecoming,” *SIAN* Spring 2010). One is now on view in the museum’s Steelworkers’ Memorial, along with a display that discusses their production, the 9/11 tragedy, and their homecoming to Coatesville. As part of the future expansion, the NISHM plans to develop a memorial and exhibit of the World Trade Center steel, in which the tridents will stand in the exact formation as they originally stood in the North Tower of the World Trade Center.

The idea by the Graystone Society and then-Lukens Steel to reuse one of the plant’s industrial buildings was realized with the help of Ed Frey, General Manager of ArcelorMittal’s eastern plate division, and his team. “ArcelorMittal Coatesville is pleased to transform a 20-year vision into a reality through the donation of the 120-in. rolling mill and motor house to the National Iron & Steel Heritage Museum. This wouldn’t be possible without the support from our leadership at both the U.S.A. and corporate levels,” said Frey. “As the oldest continuously operating steel mill in the U.S., we have a long history here in Coatesville. Yes, we produce steel that is critical to our modern life, but we also strive to be an active and welcomed member of this community.”

The new acquisitions will expand the indoor exhibit area by four acres and will transform currently unused industrial structures into a vibrant museum centered on the story and science of iron and steel manufacturing. The additions will complement the existing buildings and objects already open to visitors throughout the Lukens National Historic District. These include the Brandywine Mansion (1739, 1788), home



NISHM collections

Lukens Iron & Steel Co., late 19th-c. card featuring an image of “the old mill.”

of Rebecca Lukens as well as Moses Coates before her; Terracina (1850), a Country Gothic-style house given as a wedding gift from Rebecca Lukens for her daughter Isabella and Dr. Charles Huston; Graystone Mansion (1889), a Huston family home until the 1930s and later Coatesville’s City Hall; the Lukens Executive Office Building (1902, 1916), which served as corporate headquarters until 1998; and several large-scale artifacts such as a sonarsphere formerly used in a U.S. submarine.

NISHM president and direct descendant of Rebecca Lukens, Scott G. Huston, noted that the organization is excited for the new opportunity to highlight the industrial side of Coatesville’s history. The domestic and corporate stories are already well-represented for visitors, with the family homes and office building in the Lukens Historic District.



Sam Radziviluk/NISHM

Motor house.



NISHM collections

The 120-in. mill shipping bay on a busy day.

Now the expansion will allow visitors to go inside industrial buildings and experience the scope and scale of manufacturing processes. Further, Huston explained, the proximity of the mill buildings to the family homes shows that Lukens Steel was an entrepreneurial story first; the proprietors developed and grew the business in their own neighborhood. The new spaces may also provide opportunities to explore related local industries: construction, bricklaying, and other trades necessary to support the town and the steel industry.

The museum is planning displays, large-scale exhibits, and artifacts of iron and steel processes, products, and people. Educational exhibits and live demonstrations will take the visitor through the world of how steel is made, with a special focus on science and engineering. Visitors will view the multitude of structures, from bridges, public buildings, to military vehicles that contain steel. Rotating exhibits, similar to the recent *Pennsylvania Iron & Steel: 300 Years of Industrial Might*, will be showcased in the new museum, along with historic artifacts and collections currently housed in the Lukens Executive Office Building and C. L. Huston III Firehouse.

Much work is needed before the buildings will be visitor-safe. A portion of the motor house is planned to open to visitors first. After opening, the NISHM will be an expanded national center for educating the public about the important history and heritage of iron and steel making in America and will create a regional cultural resource and tourism destination that will drive economic development in Chester County. Huston is exhilarated over the future potential of the museum: "To finally be able to show visitors the lifecycle of steel in its entirety and view the World Trade Center tri-

dents as they once stood is a great honor. But most importantly, to ignite passion in young minds to science, technology, engineering, arts, and math is critical to our collective future." NISHM Executive Director James Ziegler agrees, "This is a great, great day, for Coatesville." And for iron and steel heritage as well.

LeAnne Zolovich, Sam Radziviluk, Melinda Williams, and Marni Walter



Saylor Gregg Architects

Artist's rendering of the future museum space.



NISHM collections

Hot plate coming off of the 120-in. mill.

CONFERENCES & WORKSHOPS

The **World Canals Conference (WCC2017), Our Vital Waterways: Agents of Transformation**, will take place Sept. 24–28 at the newly restored Hotel Syracuse (now Marriott Downtown). The conference brings together waterway industry experts who will introduce new perspectives into the revitalization of the world's waterways. WCC2017 highlights topics surrounding the world's waterways, including education, exploration, and collaboration across continents. Speakers hail from Poland, Scotland, Korea, the U.K., and the Netherlands, as well as throughout the U.S.

WCC2017 coincides with the bicentennial of Erie Canal construction and offers opportunities to discuss canals and inland waterways to promote tourism, spur economic and community development, improve environmental quality, and exchange best practices on protection strategies for historic sites. Attendees can cruise the National Historic Landmark Erie, Oswego, and Cayuga-Seneca canals during conference study tours and make behind-the-scenes visits to canal operations and restoration projects. Optional pre- and post-conference tours that extend from Lake Champlain to Buffalo are also planned.

The tugboats *Syracuse* (pictured below) and *Reliable* were built at the NYS Canal repair shops at Syracuse Inner Harbor during the 1930s, along with a score of smaller Tender Tugs and a few dozen Buoy Boats, used to service kerosene lanterns on aids to navigation throughout the Erie, Champlain, Oswego, and Cayuga-Seneca canals. The shops have since moved to Lysander and the buoys are no longer illuminated, but many of the boats remain in service.



Mark DeCracker

Tug Syracuse (1933), one of several historic tugboats still hard at work on the NYS Canal System.

Co-hosted by the New York State Canal Corporation, Erie Canalway National Heritage Corridor and Visit Syracuse, and sponsored by I Love NY, National Grid, Honeywell, O'Brien & Gere, and more. Info: <http://wcc2017syracuse.com>.

The **National Preservation Institute** has announced its 2017 schedule of professional training seminars in historic preservation and cultural resource management. NPI is a non-profit organization founded in 1980 to educate those involved in the management, preservation, and stewardship of cultural heritage. Classes are offered in locations throughout the U.S. Seminar topics include managing cultural heritage issues at superfund sites, emerging technologies for cultural resources (drones, GIS, etc.), historic bridges and roads, landscape preservation, and more. Info: www.npi.org. ■

IA ON THE WEB

Construction History Resources (www.constructionhistory-society.org/resources/). The Construction History Society of America has updated its website to include a new resources section for those researching or teaching on the topic. Includes syllabi, books of interest, videos, podcasts, and more.

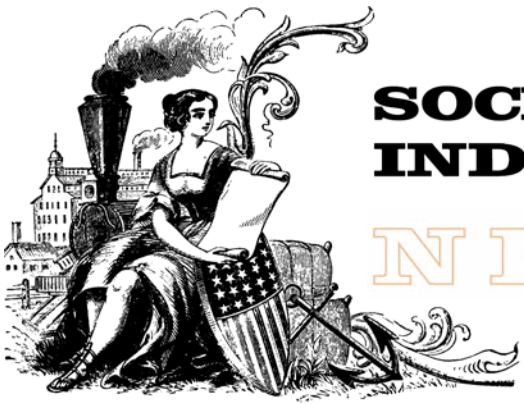
Living Landscape Observer Featured Voices: Allen Dieterich-Ward. (<http://livinglandscapeobserver.net/featured-voice-allen-dieterich-ward/>). An interview with the author of *Beyond Rust: Metropolitan Pittsburgh and the State of Industrial America* (UPenn Press, 2015). Dieterich-Ward blends political, social, and environmental history in exploring the relationship between an urban center and its hinterlands.

Meet Our Foamer—Mike Patton (www.youtube.com, search on title). GE produced this brief biographical video on Patton, who manages GE's locomotive manufacturing facility in Fort Worth, Tex. It celebrates Mike's passion for locomotives. He proudly wears the label of "foamer," people who are said to foam at the mouth when they see a train. The video includes some good interior views of the plant.

Preparing for an Apocalypse: Y2K (<http://www.cbi.umn.edu/Y2K/index.html>). A web resource based on an exhibit curated by Stephanie H. Crowe. The materials include various types of documents and demonstrate a range of institutions and approaches to the Year 2000 Problem, or Millennium Bug, from governmental preparations to personal disaster planning.

Southeast Chicago Historical Society (<http://www.idaillinois.org/cdm/landingpage/collection/pshs03>). Features a collection particularly strong in materials related to industrial and labor history. The collection includes artifacts related to Wisconsin Steel, U.S. Steel South Works, Republic Steel, Acme Coke/Interlake Steel, Valley Mould, and others. Materials digitized from this collection focus on industries in the Calumet region other than Pullman and Acme/Interlake Steel. Other area industries such as General Mills, the State Line Generating Station, and local shipyards are also included. Labor activities, especially the

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PUBLICATIONS OF INTEREST

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COMPILED BY

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GENERAL INTEREST

- ◆ **Engineering Heritage Australia Magazine**, Vol. 2, No. 5 (Jan. 2017), www.engineersaustralia.org.au/engineering-heritage-australia. Includes an editorial about Robert Vogel (SIA) and the SIA, making the point how useful two of SIA's long-time Australian members have found their contacts with the North American organization. Other articles include Owen Peake, *The Murtoa Stick Shed – A Very Big Tin Shed* (an immense WWII-era wheat shed. The last surviving example is 280 m long and 60 m wide, constructed of upright wood poles, planted directly in the ground and covered by a light timber roof covered in corrugated galvanized iron); John Schultz, *An American's View of Australian Engineering Heritage* (travelogue of a visit to engineering heritage sites in 2016); Margaret Doring, *Woolloomooloo Finger Wharf*, Part 2 of 3 (covers the 1980s when the wharf was threatened with redevelopment and preservationists and public opposed demolition); and Keith Baker, *A Tourist's Exposure to the Industrial Heritage of Hawaii* (a mixed bag of industrial heritage display and interpretation).
- ◆ Thomas H. Fehring (SIA). **The Magnificent Machines of Milwaukee and the Engineers Who Created Them**. CreateSpace Independent Publishing Platform, 2017. 442 pp., illus. \$21.99. In telling the story of Milwaukee's industrial history during the Century of Progress (the hundred years following the U.S. Civil War), the book discusses over 100 engineering accomplishments, summarizes individual stories of over 70 early Milwaukee companies, provides the biographies of dozens of engineering innovators, and discusses the significance of their engineering achievements. Proceeds from sales benefit the Milwaukee Historical Society.
- ◆ Historic Districts Council. **Gowanus, Brooklyn**. 2012. Avail. online at <http://sixtocelebrate.wpengine.com/wp-content/uploads/2013/09/HDC-6toC-Gowanus.pdf>. Each year New York City's HDC selects "Six to Celebrate" and targets the chosen historic sites or neighborhoods for promotion, advocacy, and documentation, including guidebooks like this one. The industrial Gowanus neighborhood has been endangered by attempts to re-zone it for residential and retail development. A number of the sites in the guide have already been lost.
- ◆ Nathan Kensinger. **In Gowanus, One Last Vestige of Brooklyn's Industrial Waterfront**. *Curbed New York* (ny.curbed.com). Photo essay focusing on the 1886 S.W. Bowne Grain Storehouse and its deterioration from purposeful neglect. Places it in the context of other recent industrial heritage losses in this neighborhood surrounding the Gowanus Canal.
- ◆ **IA News**, No. 180 (Spring 2017) includes an update on restoration of the Leigh Mill Spinners engine (twin horizontal cross compound engine of 1925), subject of an AIA preservation grant; David Pearce, *Glenfield Tunnel—in 1832, the Longest Railway Tunnel in the World* (the Leicester Industrial History Society has published a series of booklets, www.lihs.org.uk); Brian Davies, *The 'Hetty' Winding Engine* (preservation of the Great Western Colliery Co. steam winding engine); Peter Stanier, *Westbury Cement Works* (opened in 1962, demolished in 2016); *Whitechapel Bell Foundry* (foundry in operation in Whitechapel since at least the 1570s and at its present site since 1738 announces it will close in May 2017); and a round-up of other IA news from the U.K. and beyond.
- ◆ **TICCIH Bulletin No. 75** (1Q, 2017) includes Patrick Martin (SIA), *Greetings from Patrick Martin, TICCIH President* (a round-up of recent TICCIH accomplishments and milestones); Oana Tiganea, *Romania, Communism's Steel Giants* (steelworks from the late 1940s to 1989, some abandoned, others still in operation); Bode Morin (SIA), *U.S.A., World Heritage Tentative List* (critique of the listing process for industrial heritage); Rolf Hohmann, *Germany, The Water Systems of Augsburg, World Heritage?* (Bavarian waterworks of 1879); Grete Swensen, *Norway, Industrial Buildings as Cultural Sector Injections* (reusing industrial buildings to house cultural activities); James Douet, *International, The Art Factory* (international perspective on the association of old industrial spaces with avant-garde art); Aurore Caignet, *France, U.K., Re-using Industrial Buildings in France and England* (challenges of maintaining industrial character when re-used for cultural/artistic activities); Patrik Reutersward, *Sweden, Restoration and Preservation of Steel Structures* (successful treatment approaches); Tim Scarlett (SIA), *Pullman Industrial Initiative* (collaborative agreement between the National Park Service and Michigan Tech's Industrial Heritage and Archaeology program to undertake new research at Pullman National Monument in Chicago); and much more! A very meaty issue.

MINES & MINING

- ◆ Andrea C. Allard. **A War of Words: The Mesaba Ore and Hibbing News Takes on the “Big Fellows.”** *Minnesota History*, Vol. 65, No. 3 (Fall 2016), pp. 101–110. Journalistic activism during one of the largest and most violent strikes in Minnesota history during the summer of 1916. While most Iron Range newspapers supported U.S. Steel, the publishers of *The Mesaba Ore and Hibbing News* stood out in condemning the company and, particularly, its subsidiary, the Oliver Mining Co.
- ◆ Lorraine Boissoneault. **The Coal Mining Massacre America Forgot.** *Smithsonian.com* (Apr. 25, 2017). Recounts the combination of perilous working conditions and the tensions between miners and company guards that led to massive strikes and sparked a gunfight in downtown Matewan, W.Va. on May 19, 1920.
- ◆ Center for Land Use Interpretation. **Hollowed Earth: The World of Underground Business Parks.** *The Lay of the Land Newsletter* (Winter 2017), <http://www.clui.org/newsletter/archive>. Former limestone mines, primarily in Missouri, Tennessee, Kentucky, and western Pennsylvania, are now repurposed for such activities as managing government archives, manufacturing equipment, storing food and data, among others. Provides an overview and many photos of this vast network of underground office, storage, and logistics facilities.
- ◆ Lawrence P. Gooley. **Playing the Hand You’re Dealt: Billy Richards, ‘the Armless Wonder.’** *The New York History Blog* (<http://newyorkhistoryblog.org>), Feb. 28, 2017. The story of an iron miner who lost both forearms in a “missed hole” explosion yet managed not only to survive but to thrive.
- ◆ David LaVigne. **Rebel Girls: Women in the Mesabi Iron Range Strike of 1916.** *Minnesota History*, Vol. 65, No. 3 (Fall 2016), pp. 90–100. From labor activist Elizabeth Gurley Flynn of Industrial Workers of the World to housewives fighting eviction of their families from company-owned housing, details the 1916 battle on one of Minnesota’s iron ranges.

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With Thanks.

Striking workers demanded higher wages, a shorter work day, and pay that was not tied to the amount of ore produced.

- ◆ Don Paulson. **Mines, Miners and Much More.** Twain Assoc., 2015. \$24. Avail.: <https://minesminersouraycolorado.wordpress.com/>. An illustrated guide and history to the gold and silver mining district of the San Juan Triangle of southwestern Colorado. Rev.: *MHN* (Winter 2016).
- ◆ Ron Pearson. **End of the Line: Rockhill #9. Part III: Maintenance Shop Area.** *TT*, Vol. 29, No. 1 (Spring 2017), pp. 10–18. Rockhill #9 was the last deep mine excavated and operated by the Rockhill Coal Co. Part III of a six-part series about the mine, its main structures, and its haulage systems including the East Broad Top RR; includes details about the mine motor repair shop, mine car repair shop, and limestone powder loading shed, plus other features. Photos and sketches.
- ◆ Clark C. Spence. **A History of Gold Dredging in Idaho.** Univ. of Colo. Pr., 2016. 336 pp. \$57. The financing, operations, and impact on the environment from the 1880s to the 1960s. Focus is on bucket-line dredges and dragline dredges. Rev.: *MHN* (Winter 2016).

WATER TRANSPORT

- ◆ Erin Blakemore. **Shipwreck Identified as Rare Canal Boat.** *Smithsonian.com* (May 4, 2017). A shipwreck at the bottom of New York’s Oneida Lake has been positively identified as a rare Durham boat, a type of flat-bottom boat that could be rowed or sailed, and carry around 17 tons of cargo. Durham boats were used on rivers during the colonial period and were common in the early years of the Erie Canal.
- ◆ W. E. Trout, III (SIA), John Hairr, and Nancy R. Trout. **The Cape Fear River Atlas.** Virginia Canals & Navigations Society (Avail.: www.vacanals.org), 2016. 152 pp., illus. The final atlas in the society’s series of 21 river studies in Virginia and North Carolina, together totaling over 1,800 pages of maps and text, and covering over 3,000 miles of rivers. Each river was explored at low water, the river and canal sites mapped and given site numbers, and a basic history developed. These atlases provide thorough background information that can be used by canal and river buffs, archeologists, and historians alike for further research and to promote river preservation. The canal society’s archives are in its new Virginia Canal Museum near Lynchburg.

RAILROADS

- ◆ Robert E. Gallamore and John R. Meyer. **American Railroads: Decline and Renaissance in the Twentieth Century.** Harvard Univ. Pr., 2016 (paperback reprint of 2014 ed.). 528 pp. Analysis of the economics, technological change, and the impact of public policy on an iconic American industry. It draws together the themes of infrastructure development, regulation, stagnation and financial crisis, deregulation, and finally revitalization.
- ◆ David Kahler. **The Railroad and the Art of Place.** Center for Railroad Photography and Art, Madison, Wis., 2016. 152 pp., photos. \$60. Featuring an introduction and 151 duotone photographs of railroads in Appalachia, taken beginning in 1951, and essays by Jeff Brouws and Scott Lothes, this volume offers an artist’s interpretation and exploration of places that have been deeply affected by the railroad.

- ◆ David Lassen. **The Hole Truth.** *Trains*, Vol. 77, No. 2 (Feb. 2017), pp. 28–35. This article on Switzerland’s Gotthard Base Tunnel offers a short history of the pass and why the new tunnel was built. Nice maps and pictures, and a description of the special excursions offered for four months last year that included a stop at the emergency station in the middle of the tunnel and the museum exhibits associated with the tunnel.
- ◆ Mark Ovenden. **Transit Maps of the World: Expanded and Updated Edition of the World’s First Collection of Every Urban Train Map on Earth.** Penguin, 2015. 176 pp. \$35. Completely updated and expanded version of the 2007 original, this compendium traces the cartographic history of mass transit with 250 maps and entries on almost 1,000 systems.
- ◆ Brian Schmidt. **National Gateway Realized.** *Trains*, Vol. 77, No. 2 (Feb. 2017), pp. 38–45. Describes a bit of the history of the project to expand the Virginia Ave. Tunnel in Washington, D.C. and previous tunnels. A description of the difficulties in expanding a tunnel in a populated area and the precautions and special measures taken to minimize disruption. Includes the surprise discovery of part of an 1870s tunnel still there and in the way, and mentions some of the 300 historic artifacts uncovered during the work.
- ◆ James Wolfinger. **Running the Rails: Capital and Labor in the Philadelphia Transit Industry.** Cornell Univ. Pr., 2016. Illus. Chronicles the evolution of management strategies to dominate labor, quell strikes, and control the nature of transit work. Sets Philadelphia’s local transit history within broader national trends. *PMHB* (Apr. 2017), pp. 209–11.
- ◆ Donovan Webster. **What Really Felled the Hindenburg? On the 80th Anniversary of the Conflagration, Mysteries Still Remain.** *Smithsonian.com* (May 4, 2017). The Smithsonian’s National Air and Space Museum has an impressive collection of Hindenburg artifacts and ephemera. Curator Tom Crouch discusses the era of rigid airships in historical perspective, including the ongoing debate over what caused the Hindenburg disaster.

AGRICULTURE & FOOD PROCESSING

- ◆ **Old Mill News**, Vol. 43, No. 1 (Winter 2016) includes *Parker Mill History* (gristmill in Ann Arbor, Mich.); Leon Millburn, *A Brief History of Forbes Mill* (gristmill constructed during the Gold Rush-era of the 1850s in Los Gatos, Calif.); Char Seymour, *Conrad Rice Mill* (in New Iberia, La.); Chuck Gullage, *Musconetcong Watershed Association Asbury Mill Restoration* (former New Jersey gristmill and graphite mill converted to offices); and Greg Stiles, *Butte Creek Mill—Lost to Fire* (at Eagle Point, Ore.). Vol. 43, No. 2 (Spring 2016) includes Amy Klug, *The Old Mill of Guilford, Oak Ridge, North Carolina* (overview of history and preservation) and Ricky Brightwell, *A Special Day at Brightwell’s Mill* (listed on the National Register, located in Madison Heights, Va.).
- ◆ Natasha Geiling. **Raise a Glass to the Smithsonian’s First Beer Scholar.** *Smithsonian.com* (Feb. 2017). Theresa McCulla is heading the Smithsonian’s new Brewing History Initiative, supported with funding from the Brewers’ Association, a trade group. She will be working on research that expands the National Museum of American History’s understanding of the role of brewing in the national culture.
- ◆ Diane Wenger. **Christopher Demuth: From “Single Brother” to Celebrated Snuff Maker.** *PMHB* Vol. 141, No. 2 (Apr. 2017), pp. 115–144. Trained in the Moravian community as a carpenter, Demuth went on to be the most successful tobacconist in Lancaster, specializing in snuff. The Demuth Tobacco Shop operated in Lancaster from ca. 1770 to 2010.
- ◆ Jason Wilson. **Dairy Made: Can Artisanal Cheese Help Save Vermont’s Historic Landscape?** *Preservation* (Spring 2017), pp. 16–23. Vermont’s high-end dairy industry has become a major part of keeping historic farm landscapes intact. This article focuses on converting barns to goat dairies, which fetch more stable prices for milk than cow dairies.

AUTOMOBILES & HIGHWAYS

- ◆ Simon Romero. **Deep in the Brazilian Amazon, Exploring the Ruins of Ford’s Fantasyland.** *NYT* (Feb. 21, 2017), p. A6. Reporter explores the ruins of the failed company town built by Henry Ford to supply rubber to his auto factories.
- ◆ Frank E. Wrenick and Elaine V. Wrenick. **Automobile Manufacturers of Cleveland and Ohio, 1864–1942.** McFarland, 2016. 268 pp., illus. \$39.95. Avail.: www.mcfarlandpub.com. More than 550 manufacturers are covered in this detailed look at the heyday of automobile manufacturing in Ohio. In addition to familiar names such as Jordan, Baker, Peerless, and White of Cleveland, lesser-known ventures such as Auto-Bug are also included. Attention is also given to ancillary industries and services.

AERONAUTICS & AEROSPACE

- ◆ Roger Bergerson. **“The West Point of the Sky:” The U.S. Army’s Air Service Mechanics School in St. Paul’s Midway, 1917–1918.** *Ramsey County [Minnesota] History*, Vol. 51, No. 4 (Winter 2017), pp. 20–26. The Army took over the Willys-Overland automobile distribution and service center to train aviation mechanics for WWI. Though short-lived, the school turned out thousands of skilled mechanics. The building reverted to use by the automaker who sold it to International Harvester in 1928 for truck, tractor, and power unit sales and distribution. In the 1980s, the building was converted to offices and is now known as Court International.

BRIDGES

- ◆ **Covered Bridge Topics**, Vol. 75, No. 2 (Spring 2017) includes articles and photographs of covered bridges in St. Johnsbury, Vt.; Stark, N.H.; Missouri; Gatineau County, Que.; Pittsford, Vt.; and Canisteo, N.Y. (the latter an unusual boxed railroad truss). Vol. 75, No. 3 (Summer 2017) includes Bucks County, Pa.; Calhoun County, Ala.; and Pickaway County, Ohio. Also a brief article on Long and Haupt-truss bridges built by Robert Murray during the middle decades of the 19th century, all located in Delaware County, N.Y.
- ◆ Dennis Fernandez. **Long Key Bridge Pier Replacement.** *ASPIRE, The Concrete Bridge Magazine* (Winter 2017), pp. 12–15. Recently completed project to replace the V-piers of the Long Key Bridge, which was built in 1981 and was the “first precast-concrete, segmental box-girder in the world to

(continued on page 14)

Industrial Sites Considered for the Revised U.S. World Heritage Tentative List

On Dec. 9, 2016, the U.S. Dept. of the Interior, through the National Park Service (NPS) released the revised U.S. World Heritage tentative list following a year of consultations with the International Council on Monuments and Sites (ICOMOS) and topical experts including members of SIA and TICCIH. The tentative list identifies natural and cultural sites deemed eligible for United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage listing, but these still require a formal application and nomination process. While earlier studies including the US/ICOMOS Gap report and internal and external consultations indicated a strong need to increase the number of industrial and technology sites on the tentative list, the committee faced some challenges fulfilling that charge and only put forth the Brooklyn Bridge and Chicago skyscrapers, both considered for their significant technological advancements (see *SIAN* Spring 2016).

Two important conditions for nominating cultural sites are the need to demonstrate outstanding universal value (OUV) on a global scale and be largely complete, intact, and protected heritage sites. Most industrial sites that are significant enough to meet the OUV criteria have existed for long periods of time and experienced great change in their operations and functions, unlike

sites represented through architecture that can stay much more intact over time. Other industrial sites may be well preserved and protected but may not represent enough OUV for consideration. The NPS committee considered several well-protected industrial sites including the Detroit Piquette Plant where Henry Ford invented and built the first 12,000 Model Ts (tour site, 2005 SIA Fall Tour, Detroit; *SIAN* Fall 2006); the EB1 Breeder Reactor in Idaho, the first nuclear reactor built for peace-time functions; and Cornwall Iron Furnaces, a well-preserved, protected, and significant charcoal iron site in Pennsylvania.

The NPS commissioned a preliminary study from ICOMOS to look at the proposed tentative list. The report, which strongly influenced the final list, concluded that the Piquette Plant lacked enough original equipment related to the period of significance, and Cornwall, which maintains a relatively complete industrial complex, also did not have enough original equipment from the period of greatest significance. The report suggested that both sites in their current configurations would need to expand their boundaries and include additional Ford sites in Detroit and company towns in Cornwall to enhance their eligibility. The EB1 reactor was given a positive review, but the site owner, the U.S. Dept. of Energy, was not willing to list the site.



Brooklyn Bridge, 1896.

Geo. P. Hall & Son

The tentative list process highlighted the challenges of identifying American industrial sites that meet the requirements of OUV and maintain enough original protected fabric for consideration. The Piquette Plant, for example, is not significant for its structure. Its building is an architecturally unremarkable multi-story factory. The tools and equipment it contained were equally unremarkable, designed for nearly any type of industrial production. The significance lies in what happened inside that building, in the ideas that were generated that led to the creation of a low-cost automobile and ultimately to its mass-production at the later Highland Park plant. Unfortunately it is difficult to fit this significance into one of the ten criteria required of World Heritage and past practice. While the expansion of the potential nomination has merit, both the Ford Highland Park plant and the Rouge Complex, which have high OUV, have problems

with authenticity and completeness.

The proposed tentative list was published in the Federal Register on Dec. 9, 2016. The notice allowed a 15-day comment period. Once comments were received the list was finalized and the materials sent to UNESCO. The sites on the final list will then be encouraged to begin the formal World Heritage application process, which could take several years. However, only one site from each country may be nominated each year. Sites that vied for a spot on the tentative list but did not make it may incorporate some of the suggestions from the ICOMOS preliminary study and reapply for the next tentative list revision in 2026. The Piquette Plant will continue preservation and development at the site as if they were listed and will work to strengthen their position for future consideration.

Bode Morin

Jet Lowe, photographer. HAER MI-347.



Ford Piquette Plant, corner of Piquette Avenue & Beaubien, Detroit, Mich., ca. 1968.



Ford Piquette Plant, second floor interior, Ford engine cutaway and mill construction, ca. 1968.

SITES & STRUCTURES

Vulcan Materials Co. recently donated a rare **Plymouth industrial plant locomotive** to the Museum of the American Railroad in Frisco, Texas. The small, diesel-powered, two-axle engine represents an important aspect of railroading—that of moving cars within industrial facilities. Weighing 30 tons, it was ideal for moving a few cars at a time over lightweight trackage for processing of aggregate materials. The locomotive appears to be a 1943 Model ML8. Following service in the U.S. Army, the locomotive had a long career at Vulcan's Brownwood, Texas facility, shunting cars in the production of asphalt. When Vulcan assumed ownership of the Frisco aggregates unloading and transfer facility, the company offered the Brownwood engine as a donation, including transportation and a new blue paint job. The locomotive now represents the smallest standard-gauge engine in the museum's collection.

In January, 24 new National Historic Landmarks were announced, several of which are IA-related. The **New York State Barge Canal** was built explicitly to counter the growing monopoly of railroad corporations over the American economy. This massive early 20th-c. enlargement of New York's canal system was an embodiment of a Progressive Era emphasis on public works. The spine of the canal is a direct descendant of the Erie Canal, which opened the interior of North America to settlement and commercial agriculture, transforming the Atlantic economy. Nomination written by Duncan Hay (SIA).

W. A. Young & Sons Foundry and Machine Shop in Rices Landing, Pa., is an outstanding example of a small, family-

owned, 20th-c. foundry and machine shop. "Job shops" like W. A. Young & Sons did custom work for a variety of clients and were an important component of the American industrial economy. The property includes a fine collection of machine tools. The site was documented by HAER in 1991, led by Christopher Marston and Mark M. Brown (both SIA). NHL nomination written by Gerry Kuncio.

The **Davis-Ferris Organ**, built for a New York City Episcopal church in 1846–1847, is an example of the technical and mechanical achievements in the pre-Civil War American organ-building industry. Forty years later, the organ was sold to the Round Lake Camp Meeting in Upstate New York to accompany the popular Methodist summer gatherings. It eventually anchored a transition to a Chautauqua-style institution of culture, education, and enlightenment. This organ is a record of American music-making covering both sacred and secular genres.

Built in the late 1920s, Nebraska's **Omaha Union Station** is one of the most distinctive and complete examples of Art Deco architecture in the nation. The station expresses the style's innovative and diverse surface ornamentation inspired by the machine age. As one of the earliest Art Deco train stations designed by the Union Pacific RR, its ultra-modern appearance was a major departure from previous railroad station designs.

Also listed were the **Eldean Bridge** and **West Union Bridge**, which were featured in the Winter 2017 SIAN. ■

IA EXHIBITS

Donald Sultan: The Disaster Paintings. In the 1980s, artist Donald Sultan began his industrial landscape series the *Disaster Paintings*, using images of actual events drawn from the daily newspaper. Sultan's *Disaster Paintings* illustrate robust, man-made structures such as industrial plants and train cars, as fragile constructs that can be undone by catastrophic events. In the paintings, Sultan combined this subject matter with industrial materials including tar and Masonite tiles. The resulting works exemplify in both media and concept the vulnerability of the most progressive manufactured elements of modern culture. This exhibit is displayed at the Smithsonian American Art Museum, Renwick Gallery, 8th and F Streets, N.W., Washington, D.C., running May 26–Sept. 4, 2017. Info: <http://americanart.si.edu/exhibitions/archive/2017/sultan/>

An exhibit, **Hunting the Whale: The Rise and Fall of a Southampton Industry**, adds new discoveries to the accumulation of documentation and artifacts collected over more than 100 years to illuminate Southampton Village's prominent role in the whaling industry at its mid-19th-c. height. Whaling tools, maps, illustrations, archival images,

and text will be displayed. Among those whose roles will be highlighted are local indigenous people, slaves, servants, whaling captains, and the families that were sustained by the whaling industry. This exhibit takes place inside the Southampton Historical Museum's historic Captain Albert Rogers Mansion, a 20-room Greek-Revival house built in 1843 during the peak of the whaling industry (17 Meeting House Lane in Southampton, Long Island, N.Y.), running Mar. 4–Dec. 30, 2017. Info: <http://www.southamptonhistoricalmuseum.org/exhibitions>

A new **Boeing 747-400 exhibit** is now open at the Delta Flight Museum. Ship 6301 moved to the Delta Flight Museum on April 30, 2016. After almost a year of work, this famous 747-400 opened as an exhibit on March 28, 2017. Inside, visitors are able to sit in aircraft seats, check out the upper deck, walk out on a wing, look down into the fuel tank and cargo bin, and learn all about the history of the 747 and its role in Delta's history. The plane is open 12-4 pm Thursday–Tuesday at the Delta Flight Museum, 1060 Delta Blvd., Atlanta, Ga. ■

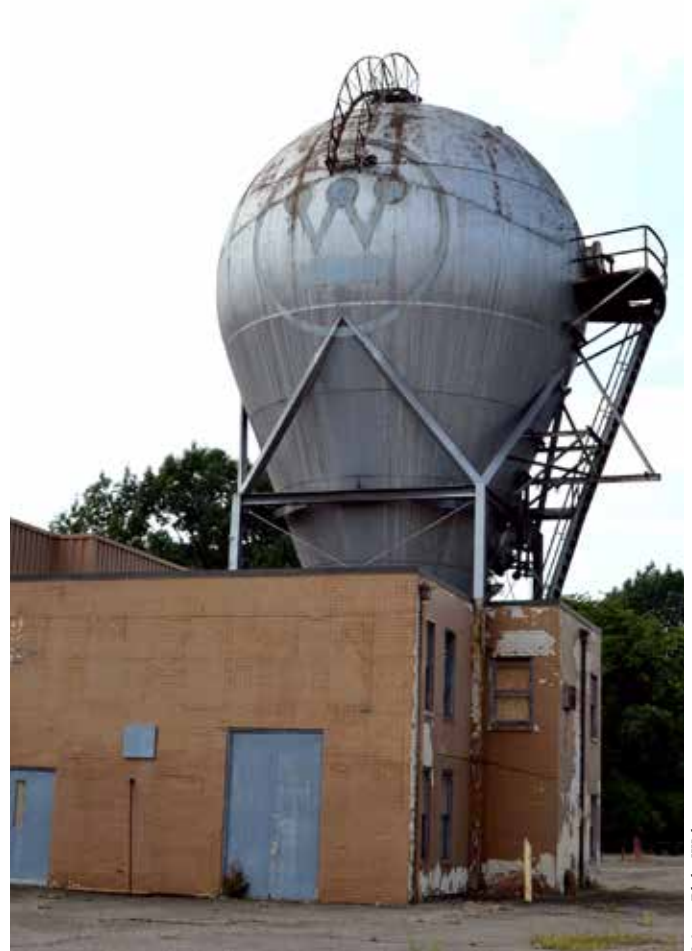
NOTES & QUERIES

Lunt Silversmiths Records Open for Research. The Hagley Museum & Library (Wilmington, Del.) is now welcoming research in the Lunt Silversmiths collection. The firm was incorporated in Greenfield, Mass., in 1901, and they catered to high-end retail stores such as Tiffany & Co. and Neiman-Marcus. In addition to business records, the collection includes hundreds of design drawings, patterns, photographs, and three-dimensional objects that include moulds, silhouettes, and unstruck blanks. Info: www.hagley.org.

The Hagley Museum & Library has also announced that the **T. Peter Brody Papers** are open for research. In 1959 Brody began working at the Westinghouse Electric Corp. in the company's research laboratories in Pittsburgh, Pa. Brody and his Westinghouse colleagues developed many inventions using his theory of active-matrix thin-film circuitry, including building the world's first active matrix liquid crystal display (LCD) in 1972. They applied this technology to flexible circuits, power controls for aircraft, industrial meters and timers, and speech recognition technology. In the 1980s Brody entered the world of commercial enterprise. His company, Panelvision, was the first active matrix LCD company in the world. His interests included pattern recognition for speech and optic identification, radar, gamma ray fluorescence, biosciences, brain probe technology, and several other forms of scientific experimentation. The T. Peter Brody papers consist of important information collected by Brody throughout his career in the form of technical reports, research studies, lecture notes, published papers, news clippings, business plans, private and professional correspondence, patents, and contracts.—*Hagley Collections and Research News* (Jan. 30, 2017)

Also related to the Westinghouse Research Laboratories, there is renewed hope for the historic **Westinghouse Atom Smasher**—the last remaining piece of that groundbreaking facility located in the suburbs of Pittsburgh, Pa. The atom smasher (operational 1937–1958) was significant as the first and at the time most powerful particle accelerator owned by a commercial enterprise, and for the discovery of photo-fission of uranium just before WWII. Although the atom smasher was torn down in January 2015, efforts are now under way to gather people and resources needed to restore this historic structure. One option being considered is to move the 65-ft.-tall steel bulb to the site of a new municipal building currently under construction in Forest Hills, Pa., a short distance from its original location. It is hoped that the atom smasher will become the centerpiece of a display featuring the community's history, Westinghouse industrial history, and STEM education. Project architects Pfaffmann + Associates put forward a call for assistance, stating they are willing to donate pro bono time on technical feasibility and budgeting, but Westinghouse alums, residents, and others who can devote time, resources, or fundraising expertise, are needed to step forward! Contact Rob Pfaffmann: rob@pfaffmann.com.

Seeking information on the production of black-faced bricks. I am a historic preservationist doing research on how early (1850–1890) black-faced decorative bricks were made in America. I am researching specifically for Cincinnati Music Hall, 1878–1879, a High Victorian Gothic building which is currently having its pressed black bricks restored. They were sandblasted in the 1970s and are now being stained black again with a Keim product. The black bricks for the Music Hall's facade were shipped from Philadelphia, and for the north and south side elevations from Zanesville, Ohio. I would like to hear from anyone who has publications or other information that describes how black bricks were made. I have read that these decorative black-faced bricks might have been placed in heated tar and then left to dry before setting them in a wall. The Music Hall is made of 4 million bricks, so any information or publications on how the bricks were made would be greatly appreciated. Please reply with any information to Thea Tjepkema via the SIAN editor, sianeditor@siahq.org. ■



The Westinghouse atom smasher and former laboratory building in 2013.

Marni Blake Walter

CHAPTER NEWS

Oliver Evans (Greater Philadelphia) presented a tour on Mar. 1 of the exhibit *Laying Tracks & Laying Foundations: Building for the Railroad*, in conjunction with the Athenaeum of Philadelphia. The chapter held an illustrated lecture by Michael Froio on Mar. 27 at the Fairmount Water Works Interpretive Center. Froio, a professional photographer and Associate Professor at Drexel University, presented his ongoing photographic project *From the Mainline: A Contemporary Survey of the Pennsylvania Railroad* inspired by the work of photographer William H. Rau, who was commissioned in the 1890s to document the PRR and its destinations. Froio's project combines historical research with contemporary imagery to explore the transitioning landscape along the former PRR from New York to Pittsburgh, highlighting the unique vernacular of facilities and infrastructure.

Roebling (Greater N.Y.-N.J.) members held their annual meeting on Jan. 28. The day featured a pre-meeting tour of Les Métalliers Champenois, organized by Gianfranco Archimede (SIA). The company is known for their work to recreate the Statue of Liberty's torch and flame. On Apr. 1 the chapter visited Hibernia, a well-preserved mining town in Morris County, N.J. The tour, led by Joe Macasek and Bierce Riley (both SIA), included the mine workings, the remains of the Hibernia Mine and Hibernia Underground Railroad, and a street of miners' houses about 150 years old.

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

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

PUBLICATIONS OF INTEREST (continued from page 9)

be erected using span-by-span method of construction with external tendons." The original V-piers featured Freyssinet hinges. The replacement piers keep the same original appearance.

- ◆ **Repair to Skilton Road Bridge, Watertown, Conn.** *The 2016 PCI Design Awards*, pp. 12–13. Constructed in 1865, the dry-laid stone arch bridge was rehabilitated using thin precast, prestressed-concrete slabs to widen and minimize impacts. The bridge was selected as the nation's "best rehabilitated bridge" by the Prestressed Concrete Institute (PCI).
- ◆ **St. Johnsbury, Vermont.** CBT (Spring 2017), pp. 3–8. Brief history and several historic photographs of 12 covered bridges.

BUILDINGS & STRUCTURES

- ◆ Victoria Lautman. **The Vanishing Stepwells of India.** Merrell, 2017. 224 pp., illus. \$60. Stunning photographs of sunken masonry structures with stairways that spiral or zigzag to access pools of water. An important part of daily village life in India from around 650 AD, they are now vanishing as modern pumping technology replaces them. Rev.: *Smithsonian.com* (Apr. 25, 2017).
- ◆ Carly Silver. **The Fears That Fueled an Ancient Border Wall.** *Smithsonian.com* (Apr. 26, 2017). Hadrian's Wall was built in 122 AD to keep the Picts out of Britain and

ostensibly to defend Romans. The wall was not particularly effective, the Picts continued to raid, and most evidence suggests that the wall's true purpose was to assuage the fears of those it supposedly guarded. The article draws some compelling comparisons to the proposed border wall between the U.S. and Mexico.

POWER GENERATION

- ◆ Christopher F. Jones. **Routes of Power: Energy and Modern America.** Harvard Univ. Pr., 2016 (paperback reprint of 2014 ed.). 320 pp. Winner of the Edelstein Prize, Society for the History of Technology, this history examines the fossil fuel revolution from the aspect of advances in energy access—canals, pipelines, and wires delivering cheap, abundant power to cities at a distance from production sites—rather than from the usual angle of advances in the technology of energy production.
- ◆ [New York City] Landmarks Preservation Commission. **Excelsior Steam Power Company Building.** 2016. 28 pp., illus. Avail: <http://s-media.nyc.gov/agencies/lpc/lp/0962.pdf>. Landmark designation report for the oldest-known, purpose-built, commercial generating station still standing in Manhattan. The Excelsior Steam Power Co. building was designed by engineer and architect William C. Gunnell

and constructed by master mason Robert L. Darragh. It was operational by 1888 when it began generating and distributing electric power to nearby industrial clients. Its dynamos and the motors used by its customers were designed and manufactured by Leo Daft, a leading figure in the development of commercial electric power systems.

- ◆ **Windmillers' Gazette**, Vol. 36, No. 2 (Spring 2017) includes Mike Brigolin, *Gear Ratios and the Hunting Tooth Theory*; Dale M. Eshelman, *On the Road Selling Flint & Walling Star Windmills* (a 1994 interview with Eshelman, who worked for Flint & Walling in the 1930s); Etienne Rogier, *The Windmills of Aleppo*; and *A Tribute: Steve Storm, California Windmill Restorer, 1948–2017*. Avail: \$20/yr., published quarterly. Christopher Gillis, Editor, P. O. Box 788, Buckeystown, MD 21717; www.windmillersgazette.org.
- ◆ Aaron V. Wunsch and Joseph E. B. Elliott (SIA). **Palazzos of Power: Central Stations of the Philadelphia Electric Company, 1900–1930**. Princeton Architectural Pr., 2016. 160 pp., photos. The book offers a visual and analytical exploration of neoclassical power stations erected by the Philadelphia Electric Co. between 1900 and 1930. With a foreword by David Nye, this collection of Joseph Elliott's large-format photographs reveals the urban landscape, monumental spaces, machinery, and intricate controls that made up the central station. Aaron Wunsch's essay provides historical context on the social and political climate.

IRON & STEEL

- ◆ Kenneth J. Kobus. **City of Steel: How Pittsburgh Became the World's Steelmaking Capital during the Carnegie Era**. Rowman & Littlefield, 2015. 291 pp., illus. \$45. Andrew Carnegie and technology take center stage in this history of Pittsburgh's steel industry with descriptions of the transformation of crucible, Bessemer, and open-hearth processes. Rev.: PMHB (Apr. 2017), pp. 208–9.
- ◆ Don Seauvageau. **Tahawus History: An Early Adirondack Railroad**. Adirondack Almanack, adirondackalmanack.com (May 29, 2017). Traces the development of an iron mine railroad originally chartered in 1839.

MISC. INDUSTRIES

- ◆ Thomas Diehl. **The Brass Furnace In the East Broad Top Foundry**. *TT*, Vol. 29, No. 1 (Spring 2017), pp. 7–9. A detailed discussion of the tilting-crucible furnace in the EBT foundry. The furnace is a Steele-Harvey type manufactured by the Monarch Engineering & Mfg. Co. beginning ca. 1903, and was capable of melting either brass or aluminum.
- ◆ Marni Blake Walter (SIA). **An Unlikely Atomic Landscape: Forest Hills and the Westinghouse Atom Smasher**. *Western Pennsylvania History*, Vol. 98, No. 3 (Fall 2015), pp. cover, 36–49. Now available online, <https://journals.psu.edu/wph/index>, search by issue, author, or title. The Westinghouse atom smasher was built by the Westinghouse Electric & Mfg. Co. in 1937 as part of the company's Research Laboratories in Forest Hills, Pa. The five-story-tall bulb-shaped structure was a pioneering laboratory for one of the first large-scale commercial nuclear physics research programs. It and the Research Labs were also a vital part of the local neighborhoods, especially the company-supported Westinghouse Plan.

ABBREVIATIONS:

- IA News = Bulletin of the Assn. for Industrial Archaeology (U.K.), www.industrial-archaeology.org.
- MHN = *Mining History News*, published by the Mining History Assn.
- SCA = Society for Commercial Archeology
- SPOOM = Society for the Preservation of Old Mills
- TICCIH = The International Committee for the Conservation of the Industrial Heritage, www.mnactec.com/ticcih
- 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.febrt.org.
- CBT = Covered Bridge Topics, published by the National Society for the Preservation of Covered Bridges
- OMN = Old Mill News, published by the Society for the Preservation of Old Mills (SPOOM)
- PMHB = The Pennsylvania Magazine of History and Biography, published by the Historical Society of Pennsylvania

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. ■

IA ON THE WEB (continued from page 6)

Memorial Day Massacre of 1937, related to these industries and local millgate communities including South Chicago, South Deering, the East Side, and Hegewisch are featured.

TICCIH Congress Proceedings are now accessible online (<https://works.bepress.com/the-internationalcommittee-for-the-conservation-of-the-industrial-heritage/>). TICCIH and the staff at the library of Michigan Technological University have scanned the Congress Proceedings and used optical character recognition software to optimize searches. Eleven volumes, beginning with the 1973 Congress, are now available. Users can search, download, print, and share an incredible array of presentations from the past 40-plus years of TICCIH scholarship. In this open-source format, searches on a full range of sites and topics are available to researchers in ways not possible in the past. TICCIH ultimately intends to add a full run of TICCIH Bulletins. ■

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. ■

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CALENDAR

2017

July 13–15: Petroleum History Symposium, Findlay, Ohio.
Paper sessions and field trips. Info: <http://petroleumhistory.org/>

July 23–29: International Assn. for Caribbean Archaeology Biennial Conference, St. Croix, U.S. Virgin Islands.
Covers all archeology from prehistoric through colonial to WWII. Info: www.stcroixarchaeology.org/iaca.html.

Aug. 25–30: Assn. for Industrial Archaeology Annual Conference, South East Midlands, Northampton, England, U.K. Info: www.industrial-archaeology.org.

Sept. 14–16: SIA FALL TOUR, NASHVILLE, TENN.
Info: <http://www.sia-web.org>.

Sept. 24–28: World Canals Conference, Syracuse, N.Y.
See description in this issue. Info: <http://wcc2017syracuse.com/>.

Oct. 4–7: Society for Commercial Archeology Conference, Cincinnati, Ohio. Info: www.sca-roadside.org.

Oct. 11–14: Assn. for Preservation Technology International Annual Conference, Ottawa, Ont. Info: www.apti.org.

Oct. 11–14: Society for the Preservation of Old Mills (SPOOM) Annual Conference, York County, Pa. Info: www.spoom.org.

Oct. 26–29: Society for the History of Technology (SHOT) Annual Meeting, Philadelphia, Pa. Info: www.historyoftechnology.org.

Dec. 11–15: ICOMOS General Assembly and Scientific Symposium, “Heritage & Democracy,” Delhi, India. Info: <http://icomosga2017.org/home-page/>.

2018

June 7–10: Mining History Assn. Annual Conference, Deadwood, S.D. Info: www.mininghistoryassociation.org.

July 9–13: 6th International Congress on Construction History, Brussels, Belgium. Info: <http://6icch.org>.

Sept. 13–15: XVII TICCIH Congress, Santiago, Chile.
TICCIH's first in Latin America. Info: www.ticcih.org. ■