



SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

Volume 45

Winter 2016

Number 1

MONTANA'S IA, HYDROPOWER PLUS

For the third time in the last three decades, Montana's Klepetko SIA Chapter sponsored an annual fall tour for the national organization. Fifty members from around the country gathered in Great Falls, Oct. 8-11. We could not have asked for better weather—clear skies, warm temperatures, and peak autumn color.

Day One, a Thursday, featured an “early bird” tour to Ashgrove Cement, Marks-Miller (wood posts and poles), and the Archie Bray Foundation (former Western Clay). The crew at **Ashgrove Cement** provided an overview of the wet process of making Portland cement and a history of the company, organized in Sunderland, Mo. in 1882 and currently the operator of eight cement plants nationwide. Ashgrove built the 450-ft.-long rotary kiln at Montana

City in 1963 to produce cement needed to construct the Yellowtail Dam on the Bighorn River. The bulk process mixes silica, shale, limestone, gypsum, and iron into a wet slurry that is fed into the kiln, which is fired with 155 tons of coal, 75 tons of coke, and 950 tons of clinker per day to a temperature of 2,700°F. Many improvements have been applied to the basic process to reduce energy consumption and air pollution impact.

At **Marks-Miller** in Clancy, just south of Montana City, Gary Marks, the owner over the last 39 years, began the tour by demonstrating a computerized Komatsu machine that has been modified to pick up lodgepole pine logs and snip them to appropriate lengths for fence rails and posts. The machine employs an appendage (developed in Sweden) consisting of a mechanical wrist-action grabber and a chainsaw. Marks-Miller has two units so equipped; each can process about 500 logs per 10-hour shift. Marks-Miller buys logs measuring up to 10-in. diameter, including beetle-killed timber. The mountain pine beetle carries a blue-staining fungus into the wood below the bark, and it was quite noticeable once our guide pointed it out. This fungus kills the tree by cutting off the flow of water and nutrients. Interestingly, the dead trees

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Saul Tammenbaum

Generating hall at Rainbow Dam.

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- Slate of Candidates for 2016 SIA Election
- Steam Returns to La Esperanza Sugar Mill

may last 10 to 15 years before they become so deteriorated as to not be worth harvesting. The entire process of debarking and shaping the poles into posts and fence poles takes place in a building filled with automated machinery. The pressure-treating process using chromated copper arsenate takes place in a 52-ft.-long vessel. Marks-Miller's market for finished rails and posts is almost entirely within Montana.

Our next stop and lunch was at the **Archie Bray Foundation**. Fred Quivik [SIA], one of the tour organizers, led our group through the historic ruins of the **Western Clay Manufacturing Co.**, established in the 1880s. Charles Bray, an English immigrant, was Western Clay's first general manager; he eventually became sole proprietor and passed ownership to his son Archie Bray, Sr. Decades ago Fred documented the historic structures of the world-class ceramics works, which has gradually transformed itself from a large industrial tile and pipe manufactory into an artists' studio.

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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Inside the kilns, the walls are coated with the remains of years of glazing from drainage tile production. It has the appearance of a thick sugar-like coating, hanging off the interior surfaces in large drips or runs like icing on an enormous Bundt cake. Lindsey Carroll, the education director, led our group on a tour of the ceramics studios while describing the origins of this unique Helena institution, which provides ceramics classes and residencies to artists from across the world.

The group returned to the tour headquarters, the **O'Haire Motor Inn**, to prepare for the evening reception at the **Lewis & Clark Interpretive Center**, located on the south bank of the Missouri River and operated by the U.S. Forest Service to commemorate the Lewis & Clark expedition. The O'Haire constitutes a "blast from the past," transporting guests back to the 1960s when tiki lounges prevailed nationwide. The O'Haire's Sip-N-Dip Lounge offers a view from the bar into a pool where mermaids frolic (actually women wearing shiny fabric tails). The mermaids take a deep breath and do a few back flips or loop-de-loops in front of the windows and wave to the admiring audiences.

Throughout our explorations, we were reminded of the Lewis & Clark expedition that crisscrossed the area in 1805-06, looking for the source of the Missouri and a path to the Pacific Ocean, among other things. All four days of our touring encountered numerous monuments, exhibits, and memorials to the early explorers. At the reception, Ellen Sievert, the Cascade County Preservation Officer, invited the Preservation Players to act out the early industrial history of Great Falls. (It should be noted that Ellen helped organize the Great Falls tours and the wonderful dinner at the Ryan Dam on Saturday evening.) The re-enactors took on the personas of characters from the city's industrial past including Paris Gibson, an acquaintance of financier James J. Hill and the man who platted the city; John D. Ryan, President of the Anaconda Copper Mining Co. and Chairman of the Board of the Montana Power Co., builder of the dams



Joel Shiprenitz

A mermaid delighted the SIA at the Tiki bar in the O'Haire Motor Inn.

2016 SIA Slate of Candidates

The Nominations Committee is pleased to present the following *draft* slate of candidates for the 2016 election:

President (2-year term)

Vote for one

Maryellen Russo

Vice President (2-year term)

Vote for one

Christopher H. Marston

David A. Simmons

Treasurer (3-year term)

Vote for one

Nanci K. Batchelor

Secretary (3-year term)

Vote for one

James E. Bouchard

Dennis S. Furbush

Director (3-year term)

Vote for two

Arron Kotlensky

Paul White

Suzanne Wray

Nominations Committee (3-year term)

Vote for one

Michael S. Raber

Fred Sutherland

SIA by-laws state that the Nominations Committee shall notify the membership of the proposed slate at least 70 days in advance of the Annual Business Meeting. **This is that notice; it is not a ballot.** Additional nominations may be made in writing over the signatures of no fewer than 12 members in good standing (dues paid for the 2016 calendar year) and delivered to the Nominations Committee chair at the address below no later than **Apr. 15, 2016**. Candidates must have given their consent to be nominated and must also be SIA members in good standing. Ballots, which will include a biographical sketch and photograph of each candidate, will be mailed in late April. Members must have paid their dues for the 2016 calendar year in order to vote.

The current Nominations Committee includes Lynn Rakos (chair), Mary Habstritt, Bill Vermes and Duncan Hay (*ex officio*). Please direct all nominations and other correspondence to: SIA Nominations Committee, c/o Lynn Rakos, 230 6th Ave., Apt 4, Brooklyn, NY 11215, (917) 515-4154; lrakos@hotmail.com. ■

located on the Missouri below Great Falls; George Shanley, a prominent local architect; and a female smelter worker enlisted by the copper company during WWII.

Day Two began with **ADF Group, Inc.**, a Montreal-based company established in 1956 to manufacture ornamental gates and fences. Today, ADF has plants in Terrebonne, Que.; Miami, Fla.; and Great Falls. The fabrication plant in Great Falls largely produces structural steel for petroleum operators in the Alberta tar sands. The facility comprises a 100,000-sq.-ft. fabrication shop and a 50,000-sq.-ft. coating shop, plus ample space for storage of structural steel. At the fabrication shop, we saw plasma cutting, welding, forming, punching, and drilling. The coating shop has state-of-the-art environmental controls for capturing fumes and dust. Dan Rooney, the general manager, led the tour, providing a step-by-step introduction to how modules are constructed: teams of three assemble 25- to 50-ton packages of steel members for finishing.

Hydroelectric power, a central theme of this year's tour, was on full display at **Rainbow Dam**, built at Rainbow Falls by Montana Power Co. in 1910. As originally designed, the 29-ft.-high dam generated 36 MW employing eight twin-

turbines. Our group toured the historic powerhouse, where the generators remain in place; they were mothballed in 2015 when a new powerhouse with a single turbine producing 63 MW came on-line. The \$230 million project allows Northwestern Energy, a utility headquartered in Butte, to remotely control power output. The single-turbine design also prevents the death of thousands of fish that used to be diced up in the old turbines. Northwestern operates five dams along the Missouri below Great Falls, built to supply power to Anaconda Copper. Our guide described the need to keep open water behind the dam in the extreme cold of Montana winters. Ice can place tremendous pressure on the dam, enough to literally push it downstream, so ice pack removal with cranes and digging irons is a nonstop job in the winter months.

Lunch was at **Giant Springs State Park** where we were also given a tour of the **Montana State Fish Hatchery**. Biologists described how they raise rainbow trout, which are released into rivers and lakes across Montana. Interestingly, the water coming out of the Giant Springs is supersaturated with nitrogen from two centuries or more underground. This would give the fish the equivalent of the bends, so the spring

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John Reap

2015 SIA Fall Tour Group at Ryan Dam.



Saul Tammenbaum

Marks-Miller, post and poles.

water is run through degassing towers prior to being introduced into the hatchery. We also explored the ruins of a chimney built by the **Montana Smelting Co.** in 1887. The silver-lead smelter was state-of-the-art when it opened but it had a short life, closing in 1901, a victim of new technologies and ore shortages.

Then it was off to **Malmstrom Air Force Base**, just east of Great Falls. After an extensive security check, the group entered the air base. The facility was established during WWII and became headquarters of the U.S. Air Force Strategic Air Command and an ICBM Missile Base in the 1960s. Today, Malmstrom is headquarters for the management of over 150 Minuteman 3 missiles, hidden in underground silos scattered around Montana. There are 15 control centers, each managing 10 missiles. The 60-ft. missiles are set in 90-ft.-deep

underground reinforced-concrete silos. Each control center is manned by two missileers working on 24-hour shifts, which sometimes extend much longer due to winter weather and icy roads. We were allowed to enter a silo which functions as a training simulator for maintenance and repair technicians. The officers who guided us pointed out their 1980s computer system (employing floppy discs no less!), guaranteeing security through obsolescence. Our guides were willing to speak candidly about duties that are monotonous but always tinged with stress since the missileers never know if the frequent drills are real or just another rehearsal. This may have been the most sobering SIA tour ever.

Next up was **Avmax**, established in 1976 as Western Avionics, an international provider of avionics repairs and services for regional aircraft and private executive jet opera-



Saul Tammenbaum

Avmax, aircraft refurbishing.



Saul Tammenbaum

At Archie Bray Foundation, the historic kilns and buildings of the Western Clay Manufacturing Co. mix with modern art pottery.

tors. Andrew Ladd showed us around a hangar at the Great Falls Airport. The hangar was built during WWII to accommodate a lend-lease program dedicated to shipping airplanes to the Russians. AvMax's Great Falls operation employs 100 workers reconditioning jet airplanes that are sold to clients in South America, Russia, Chad, and Canada. The first step is to strip the craft of engines, pumps, fuel system components, instruments, and radio communication and navigation equipment. These are sent to outside vendors to be refurbished and overhauled.

Day Three dawned sunny and clear, a perfect day to visit the **Big Stone Hutterite Colony**, one of 38 such colonies in Montana. The Hutterites are a German Anabaptist sect that left the Ukraine in 1874 over military conscription, eventually making their way to Canada and the Dakota Territory. Expansion of the original colonies has more recently precipitated a migration west into Montana. Andrew Wirtz, the elected leader of the colony, greeted our group in a barn where 200 dairy cows are milked twice daily. The colony also raises pigs and 20,000 chickens and grows winter wheat, barley, and peas on 1,400 acres, so this is an industrial-size operation. Water is drawn from a 575-ft.-deep well. Thirty families (144 people) live in the colony's residences, which are unadorned, following a precept from the 16th century: "Christians shall not apply their industry on outward ornamentation to please the world." Two teenage girls served as our guides. Children attend the colony's school through the 8th grade but when they reach 14½ years of age, they are considered adults. One of the rites of passage is being allowed to eat with the adults. Before that, the children eat in a common dining room after the adult meal. Women eat separately from the men. The Hutterites embrace certain forms of modern technology, perhaps a key to their economic success, but they strive to live in a completely utilitarian world.

The bus next made its way to the historic town of Fort Benton for lunch catered by the historic **Grand Union Hotel**. John Jacob Astor's American Fur Co. established Fort Benton in 1846. A 10-year archeological dig and reconstruction project is nearing completion at the original Fort Benton site. This has helped with an accurate recreation of the fort's log walls and adobe buildings. There is also a beautiful exhibit documenting the trade between the Blackfeet Tribe and the fur men. The Fort Benton community has also brought together an amazing collection of farm machinery in the **Montana Agricultural Center**, which is adjacent to the **Homestead Village**, a collection of buildings that represent daily life on the prairie during the "homestead boom" (1908-1920), when Montana's population practically doubled. Fort Benton has capitalized on its history unlike any other community in Montana, perhaps with the exception of Butte.

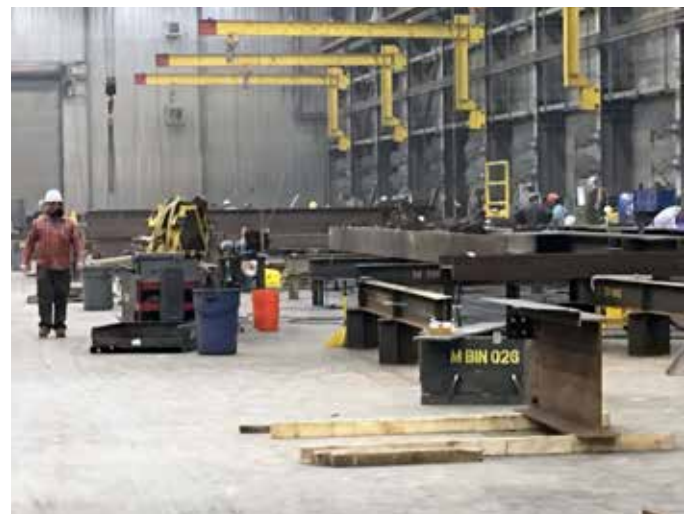
The day concluded at the **Ryan Dam** in the late autumn sun. Built by Montana Power in 1915 under the leadership of John D. Ryan, the 1,336-ft.-long and 61-ft.-high run-of-the-river dam employs six turbines to generate 60 MW. Following the tour the group gathered in the dam's 1930s clubhouse for dinner. A hearty thank you was given to Fred Quivik, Brian Shovers, and Julie Blair, who did extraordinary work to organize this year's Fall Tour.

On Sunday, a group of about twenty remained in Great Falls for a walking tour of the downtown. We were told Great Falls was a planned city, unusual for this part of the country. There were two building booms, the first in the 1880s and the second in the 1910s, that significantly shaped the city. The tour was hampered somewhat by winds gusting to 50 mph, so from time to time we lost the thread of our guide's narration (and a hat or two!). But it was a fabulous bright autumn day.

Brian Shovers and John A. McConnell



Ashgrove Cement, rotary kiln and silos.



ADF Group, Inc., steel fabrication.

IA EXHIBITS

Electric Paris will be shown at the Bruce Museum in Greenwich, Conn., from May 14 to Sept. 4, 2016. Dubbed the “City of Light” during the Enlightenment, Paris’s reputation for luminosity remained a key theme in art and literature of the 19th and early 20th centuries. This exhibit explores the ways in which artists portrayed the city’s transition from gas to electric lighting from about 1880 to 1920. Whether the subject is a gas-lit boulevard or an electric-illuminated dance hall, these works of art record how artists viewed the changing appearance of the city as it made the technological transition to electric lighting. The show will feature over 50 works—paintings, prints, photographs, and drawings—by artists such as Degas, Cassatt, Bonnard, Vuillard, Seurat, and Toulouse-Lautrec among others. Info: https://brucemuseum.org/site/exhibits_detail/electric-paris.

The Great Inka Road: Engineering an Empire is an exhibition at the Smithsonian’s National Museum of the American Indian in Washington, D.C. through Apr. 2018. More than 140 objects from the collection are on display including gold ornaments, stone carvings, and textiles. The road is interpreted through videos and map animations that explore the monumental engineering that resulted in more than 24,000 miles of roads crossing mountains, tropical lowlands, rivers, and deserts in South America. One of the exhibit’s sections is devoted to suspension bridges and another to the use of llamas and alpacas as beasts of burden. Info: www.nmai.si.edu. ■



National Museum of the American Indian

Inka Road.

IA ON THE WEB

100-Year-Old Technology of the New York City Subway (www.devour.com, search on title). This 9-min., MTA-produced video shows some of the systems in use including the West 4th St. interlocking, which dates to the 1930s.

50 Years of the National Historic Preservation Act (www.preservation50.org). Info on the public-private partnership established to commemorate the act’s 50th anniversary. While there is not much IA *per se*, there is general information on the history of the act and the evolving practice of historic preservation in the U.S. There is also an interactive map.

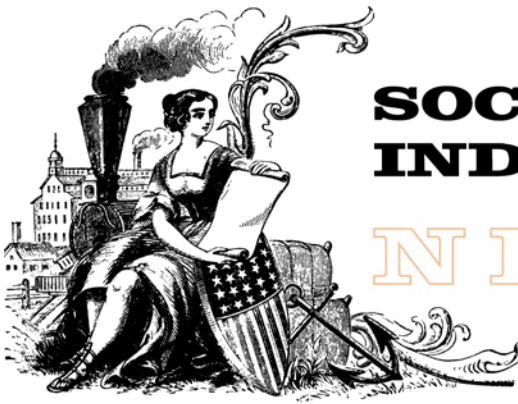
Anthracite Fields (www.juliawolfemusic.com/music/anthracite-fields). Composer Julia Wolfe won a Pulitzer Prize for this choral composition inspired by the miners of Pennsylvania’s anthracite region. The movements include Foundation (a chant of the names of injured miners), Breaker Boys (adapted from worker rhymes), Speech (adapted from a speech by John L. Lewis, president of the United Mine Workers), Flowers (inspired by the coal patch gardens kept by miners’ wives and daughters), and Appliances (an ode to electric appliances and other conveniences powered by coal). A

sample can be heard on National Public Radio (www.npr.org, search on Anthracite Fields). CDs are available from Amazon and other retailers.

Chemung County (N.Y.) Historical Society Blogs (www.chemungcountyhistoricalsociety.blogspot.com). A collection of more than 200 articles explores county history. Perhaps as many as a quarter are about industries and businesses in and around Elmira (poultry, typewriters, garbage collection, zip-pers, etc.). Indexed by subject.

Collecting Paper Cars (www.hagley.vinson) is a new digital exhibit of the Hagley Museum & Library (Wilmington, Del.). The exhibit focuses on a collection of automobile-related advertising, catalogs, and sales ephemera (paper cars) donated by Z. Taylor Vinson in 2010. The collection consists of more than 100,000 items, a selection of which is available on-line. The on-line exhibit is an accompaniment to *Driving Desire: Automobile Advertising and the American Dream*, an exhibit on display at the museum’s visitor center through Oct. 2016.

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SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

PUBLICATIONS OF INTEREST

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COMPILED BY

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

GENERAL INTEREST

- ◆ David Abraham. **The Elements of Power: Gadgets, Guns, and the Struggle for a Sustainable Future in the Rare Metal Age.** Yale Univ. Pr., 2015. 336 pp. \$30. A look at how rare metals are essential for nearly all modern electronics and green technologies, yet the procurement and use of these metals has environmental, economic, and geopolitical consequences.
- ◆ Brian Bowen, Donald Friedman, Thomas Leslie, and John Ochsendorf, eds. **Fifth International Congress on Construction History, Proceedings.** 3 Volumes. Construction History Society of America, 2015. \$148.50 for set or \$49.50 each. Avail: www.5icch.org/programs/publication. Papers from congress held in Chicago, June 2015. Volumes are organized alphabetically by author. Topics include Skyscrapers, Gothic Vaulting, History of Contracting, Midcentury Modernism, 19th-Century Bridges, Anti-Seismic Construction, Spatial Structures, Timber Trusses, Theories of Construction, Lighting, Masonry Innovations, Roman Vaulting, Equipment and Elevation, Building in Earth and Stone, Geometry and Bridges and many more. One session topic of note is 20th-Century Bridges, which includes Robert M. Frame, III [SIA], *Prestressed Suburbia: A New Material in Postwar Construction*.
- ◆ Charles Curtin. **The Science of Open Spaces: Theory and Practice for Conserving Large, Complex Systems.** Island Pr., 2015. 272 pp., illus. \$40. While not IA per se, this book challenges current approaches to preserving large landscapes and open spaces, arguing that what is needed is a science-based approach drawing on foundational sciences such as ecology, sociology, and thermodynamics. Rev.: *Living Landscape Observer* (Aug. 2015).
- ◆ Phillip Lucas. **Jefferson County Murals Should Be Preserved, Historians Say.** *Birmingham (Ala.) News* (Sept. 30, 2015). Two WPA-era murals in the county courthouse are called the "Old South" and the "New South." They are controversial because they depict blacks doing manual labor against a backdrop of whites in supervisory positions. A video, "Stuck in Time," shows the mural accompanied by Birmingham NAACP President Hezekiah Jackson's account of seeing them as a child. Against a request from the NAACP that the murals be removed, historians suggest they should remain in place and be interpreted for their educational and artistic value.
- ◆ **TICCIH Bulletin 68** (2nd Qtr., 2015) includes Massimo Preite, *After Inscription: Industrial Heritage and the UNESCO List* (opinion piece on the need for more study of the benefits of listing on the World Heritage List); Miriam Kelly, *The Domino Effect* (demolition of the Domino Sugar factory in Brooklyn, N.Y.—tour site, SIA Annual Conference, 2002); Anna Sulmowska-Ociepka, *A Second Life of the Old Gliwice Coal Mine* (Polish mine, opened in 1901, becomes industrial heritage park); Bode Morin [SIA], *New US National Historical Parks: A Significant Expansion of Federal Support for Industrial Heritage* (three new national parks—Manhattan Project, Coltsville, Blackstone River); Iain Stuart [SIA], *Broken Hill Added to National Heritage List* (Australian silver mining area); Stephen Hughes, *Industrial Archaeology in Australia* (exemplary mining heritage sites and on-line state databases); Javier Carrasco, *The Almaden Mining Park* (historic Spanish mercury mine); and Eusebi Casanelles, *Lead Mines of Bellmunt del Priorat* (Catalonian mining region, active for more than 2,000 years).
- ◆ **TICCIH Bulletin 69** (3rd Qtr., 2015) includes Inger Birkeland, *Valuing Industrial Heritage in the Anthropocene* (advocating for understanding industrial heritage as a living landscape); Nadezda Solonian, *Conception of the Development of Historical Centers in the Historic Metallurgy of the Urals* (preserving Russia's network of more than 300 sites related to metal processing); Judith Fait, *Mining Heritage in Namibia*; Rossella Maspoli, *Survey, Communication and Valorization of the Automotive Heritage* (Torino, Italy); and Hasti Tarekat, *Industrial Heritage in Indonesia*.
- ◆ **TICCIH Bulletin 70** (4th Qtr., 2015) includes Catherine Bertram, "What Do We Get Out of It?" *Local Benefits of the Nord-Pas de Calais Coalfield WHS Inscription* (explaining benefits of World Heritage Site listing to local inhabitants); Bode Morin [SIA], *The Slow Death of the Huber Breaker* (coal breaker in Ashley, Pa. [see *SIAN*, Fall 2013]); Nadezhda Solonina and Olga Shipitsyna, *Industrial Tourism in the Urals*; Vera D. Damayanti, *The Cultural Values of Traditional Industrial Landscape, Batik Giriloyo, Yogyakarta* (Indonesian traditional techniques of decorating cloth); Tom Fisher, *Animating Representations of Industrial Heritage: the Leavers Lace Machine* (combination of film, still photography, and computer animation in the Cluny Lace factory); Konrad Gutkowski, *Work with Sounds: Preserving the Acoustic Heritage of the Industrial Area* (documenting more than 600 sounds of industrial areas in Belgium, Finland, Germany, Poland, Slovenia, and Sweden); Sergio Taddonino and Nagme Ebru, *The 'Design Station' Project—Adaptive Reuse Proposal for the Old Electricity Factory, Izmir [Turkey]*; Barry Gamble, *Tarnowskie Gory Mine and Water Drainage System, Poland*; Tatjana Dizdarevic and Dusan Kramberger, *The Heritage of Mercury in Idrija, Slovenia*. Info: www.ticcih.org.

COMMUNICATIONS TECHNOLOGY

- ◆ Jonathan Coopersmith [SIA]. **Faxed: The Rise and Fall of the Fax Machine.** Johns Hopkins Univ. Pr., 2015. 320 pp. \$54.95. Traces the facsimile technology to 19th-century inventors, who overcame the substantial technical challenges of sending fax messages by telegraph and later telephone. Several successful technologies ended in failure due to high costs and complex pre-transmission preparation. Faxing finally took off in the 1960s and 1970s due to further technical refinements and liberalization of telephone networks for commercial applications. The 1980s were boom years with the number of fax machine in the U.S. growing from approximately 300,000 machines in 1983 to over 4 million in 1989. Since then the technology has declined as digital forms of communication took over. Rev.: *Cultural Studies* (Sept. 18, 2015) and *IEEE Technology & Society Magazine* (Dec. 2015).
- ◆ Vanessa Ogle. **The Global Transformation of Time, 1870-1950.** Harvard Univ. Pr., 2015. \$39.95. Chronicle of efforts to standardize clock times, and calendars, highlighting the many hurdles, debates, and disagreements, but ultimately standardization is seen as a relentlessly homogenizing force in the march of globalization. Rev.: *Financial Times* (Oct. 9, 2015).

TEXTILES

- ◆ Tim Barber. **Ringgold's John B. Callaway Cotton Gin to Become Antique Store.** *CTFP* (Aug. 3, 2015). Machinery remains in place in this 1929 gin in Ringgold, Ga.
- ◆ Greg Bluestein. **A Battle over Ga. Mill Sparks Environmental Debate.** *Atlanta Journal Constitution* (Aug. 26, 2015). The Mary-Leila Cotton Mill in Greensboro, like so many mills, is being redeveloped for housing. Environmentalists, however, are challenging the project in court with concerns that developers and environmental regulators underestimate the risks of toxins left behind by industrial processes. One environmentalist suggests that the case, if won by the environmental groups, will have a "domino effect" throughout the South.
- ◆ Barry Courter. **A Stitch in Time: Local Musician Makes Music Out of Sewing Machine Sounds.** *CTFP* (Nov. 6, 2015). Carl Caldwell records old and new sewing machines, stitching together the sounds to create a "sewing machine symphony."
- ◆ Bo Petersen. **Basketmakers Get a Sweet 'Pull' of the Past.** *Charleston (S.C.) Post & Courier* (July 30, 2015). Selecting and harvesting sweetgrass is almost as skilled a job as making the baskets themselves. Most grass is too coarse and patches of finer strands are becoming harder to find.
- ◆ Frank Reddy. **'From the Start, Chicopee Was a Cut Above.'** *Gainesville (Ga.) Times* (June 14, 2015); www.gainsevilletimes.com/archives/1103001. Residents of a model textile-mill village, established by Johnson & Johnson in 1926, have struggled economically ever since the mill closed in 1994. A new brewery and heritage trail are highlighted as attempts to revitalize the community.
- ◆ George Rhodes. **Lost in Time in Attleboro, a Huge Mill Is Being Demolished, but Its Legacy Was Almost Forgotten.** *The Sun Chronicle* (N. Attleboro, Mass.) (June 28, 2015). Howard & Bullough American Machine Co. factory, an industrial landmark along I-95, is being demolished. The 500,000 sq. ft. brick mill was built in 1894 as the American offshoot of H&B Co. of Accrington, Lancs., England. Reportedly, it was the first and possibly only direct investment of a British textile equipment manufacturer in America.

- ◆ Martin Martinez. **Threads of Dalton's History Return Home.** *Dalton (Ga.) Daily Citizen* (Apr. 20, 2015). The Bandy Heritage Center at Dalton State College has accepted the donation of a 65-piece collection of hand-tufted chenille bedspreads. The bedspread industry took off in northwest Georgia in the 1920s and 1930s.
- ◆ Jeff Wilkinson. **Palmetto Compress Renovation Celebrated.** *Columbia (S.C.) State* (Apr. 16, 2015). The 320,000-sq.-ft. brick cotton warehouse, built c. 1915, is being renovated for housing after a nearly two-decade-long preservation effort.
- ◆ Chuck Williams. **Historic Columbus Makes Saving City Mills a Signature Project.** *Columbus (Ga.) Ledger-Inquirer* (July 31, 2015). Preservation group commits \$1.2 million to preserve a 6-story flour mill of 1890 and a 5-story warehouse of 1910, located on the Chattahoochee River.

BRIDGES

- ◆ Ben Benton. **B. B. Comer Bridge Group Concedes Defeat.** *CTFP* (Nov. 27, 2015). The Comer Bridge Foundation, a group formed to preserve a historic truss bridge over the Tennessee River, failed to persuade county officials to take ownership from the State of Alabama, which plans to demolish it.
- ◆ Wesley Brown. **Archibald W. Butt Memorial Bridge Bid Scrapped to Redesign Project.** *Augusta (Ga.) Chronicle* (Sept. 1, 2015). The Butt Bridge is a reinforced-concrete arch over the Augusta Canal. It was built in 1914 and named after an Augusta native, U.S. Army major, and friend of President William Howard Taft. Butt died on the *Titanic* while returning from a diplomatic mission to Europe. Plans for the bridge to be rehabilitated attracted only one bid, which was \$500,000 over budget. Officials now have "repackaged" the project. Bike lanes, reinforcing the deck, and restoring the architectural elements such as Tuscan columns, eagle statuary, and light fixtures are still part of the package.
- ◆ Bruce Cole and Allen Wilson. **Hobart's Wonderful Floating Bridge.** *Engineering Heritage Australia*, Vol. 1, No. 8 (Oct. 2015), pp. 6-11. History of an unusual combination of vertical-lift and pontoon bridge, built in 1943, across the

CONTRIBUTORS TO THIS ISSUE

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With Thanks.

Derwent. The floating approach spans were composed of cellular reinforced-concrete pontoons, pinned together into a 3-pin arch plan, floating on its side. The bridge operated for 21 years, 1943-1964.

- ◆ Sarah Fowler. **Byram Swinging Bridge Gets Fresh Start.** *Jackson (Miss.) Clarion-Ledger* (Apr. 8, 2015). A rural suspension bridge of 1905 has been restored and re-opened to pedestrians. In recent years, a local tradition developed of lovers and newly married couples visiting the blockaded bridge and attaching locks to the cables, hoping to secure their love. Hundreds of locks have now been removed.
- ◆ Andy Humbles. **Nashville Toll Bridge Brings National Interest.** *The Tennessean* (Mar. 28, 2015). Site of a toll bridge, built in 1823, remnants of which include two stone abutments, is documented by the Historic American Engineering Record. The bridge is on the Trail of Tears. The article quotes Christopher Marston [HAER and SIA].
- ◆ Kimeko McCoy. **Couple Donates Lions to 'Balance' St. Augustine Bridge.** *Florida Times-Union* (July 2, 2015). The Bridge of Lions, which not so long ago was threatened with demolition (SIAN, Summer 1999), has been adorned with two additional lions. The bascule bridge, built in 1925-1927, is named for the original two lion statues, named Firm and Faithful, which flank the western span.
- ◆ Philip Mark Plotch. **Politics Across the Hudson: The Tappan Zee Megaproject.** Rutgers Univ. Pr., 2015. 272 pp., illus., maps. \$34.95. The political intrigue and manipulation behind the decades-long effort to replace the aging Tappan Zee Bridge. The new bridge is currently under construction.

BUILDINGS & STRUCTURES

- ◆ Wayne Crenshaw. **Dublin Ready to Light Up Its Skyscraper.** *Macon (Ga.) Telegraph* (Aug. 24, 2015). The 7-story First National Bank Building in Dublin, Ga. is described as the tallest building between Macon and Savannah. Opened in 1913, the landmark building has been restored.
- ◆ David W. Dunlap. **Latest Miracle on 34th Street: Macy's Keeps Wooden Escalators.** *NYT* (Nov. 25, 2015). The department store has just finished a \$400 million restoration; good news, 20 wooden-step escalators, manufactured by Otis Elevator in 1920, remain in operation.
- ◆ Carly Harrington. **University of Tennessee Renovating 90-Year-Old Industrial Site.** *Knoxville (Tenn.) News Sentinel* (Apr. 24, 2015). A former precast concrete manufacturing site (Southeast Precast Corp.) is being adaptively re-used for a new university facilities services headquarters. A concrete silo and an air compressor, dating to the early 1900s, will be preserved as a nod to the site's history.
- ◆ Tony Kiss. **Saving Local History with ... Beer? Breweries Give Old Buildings New Life.** *Greenville (S.C.) News* (May 18, 2015). The craft brewery movement has been a boon to historic preservation since so many brewers choose to renovate old buildings. Among the sites profiled are a bakery, mill, and post office.

LUMBER & PAPER

- ◆ Meg Mirshak. **Man Unearths History of Bath Paper, Textile Mill.** *Augusta (Ga.) Chronicle* (July 5, 2015). This mill, located in Bath, Aiken County, S.C., was demolished in 1997. It began as a paper mill in the 1850s and later became a textile mill. John Jones, a local contractor, owns the site and has been digging through the foundations and debris for over a decade.

WATER TRANSPORT

- ◆ Corey Kilgannon. **An 1850s-Era Oyster Barge Is Saved for Yet Another Life on the East River.** *NYT* (Apr. 3, 2015). An oyster barge, or perhaps more accurately, the barge's 2-story wood superstructure, has been at the Fair Haven Marina in New Haven, Conn. for about 100 years, serving as a speakeasy, a restaurant, and a bar, before closing in 1987. It is believed to have been brought up from New York City in the 1910s. Two entrepreneurs are carefully dismantling it for restoration at the Atlantic Basin in Red Hook, Brooklyn.
- ◆ Paul Post. **Restoring a Hudson River Crusader, Plank by Plank.** *NYT* (Dec. 13, 2015). Restoration of the sloop *Clearwater* at the Hudson River Maritime Museum in Kingston, N.Y.

RAILROADS

- ◆ Rob McGonigal. **The Curve That Wrecked Amtrak 188.** *Classic Trains Magazine* (June 24, 2015). On May 12, 2015, a high-speed derailment resulted in tragedy, causing many pundits to bash Amtrak for having a 50-mph curve on one of the fastest and busiest rail corridors in the U.S. This article offers a historical perspective, noting that the curve was a result of compromises made in the 1840s in the name of maintaining competition among Philadelphia's rival railroads and protecting the jobs of teamsters who profited from hauling freight between rail terminals.
- ◆ Cliff Schexnayder. **Builders of the Hoosac Tunnel.** Peter E. Randall, 2015. 668 pp., illus. \$30. A comprehensive account of the Massachusetts tunnel's construction with a focus on the politicians and engineers who persevered in a project that took over 20 years to complete, cost ten times its original proposed budget, and resulted in the deaths of 193 workers.
- ◆ Richard Stradling. **NC Museum Steam Engine Going Home to West Virginia.** *Charlotte Observer* (Mar. 27, 2015). The Buffalo Creek & Gauley N'o. 4, a 2-8-0, was purchased from the N.C. Transportation Museum by the Durbin & Greenbrier Valley RR. The intent is to restore the locomotive to working order for passenger excursions. It was built in 1926 by Baldwin for the National Ry. of Mexico but instead sold to the BC&G and used mostly to haul coal and lumber in Clay County, W.Va., until passing out of service in 1965.
- ◆ Tyler Turpin [SIA]. **Surplus Locomotives in America.** *National Assn. of State Agencies for Surplus Property News* (Spring 2015), p. 9. Brief article on the Fairbanks-Morse H-12-44, a diesel locomotive produced from 1950 to 1961, which saw use mainly on branch lines and industrial sites. The locations of 11 surviving examples are noted. www.nasasp.org.

ABBREVIATIONS:

CTFP	= Chattanooga Times Free Press
NYT	= New York Times
TICCIH	= The International Committee for the Conservation of the Industrial Heritage, www.mnactec.com/ticcih
WSJ	= Wall Street Journal

Publications of Interest is compiled from books and articles brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books and articles, especially those in their own areas of interest and those obscure titles that may not be known to other SIA members. *Publications of Interest*, c/o SIA Newsletter, 305 Rodman Road, Wilmington, DE 19809; phsianews@aol.com. ■

Steam-powered Sugar Cane Machinery Operating Again in Puerto Rico

The Hacienda La Esperanza sugar mill is operating on steam power again after being out-of-service for more than 125 years. The 2,000-acre hacienda, now a nature preserve owned by the Conservation Trust of Puerto Rico, inaugurated the steam power exhibit on Nov. 15, 2015, according to the Puerto Rican newspaper *El Nuevo Día*. The steam engine was originally acquired in 1861 by the hacienda from West Point Foundry in Cold Spring, N.Y. The engine drives a *trapiche*, a machine that uses rollers to squeeze the juice from sugar cane.

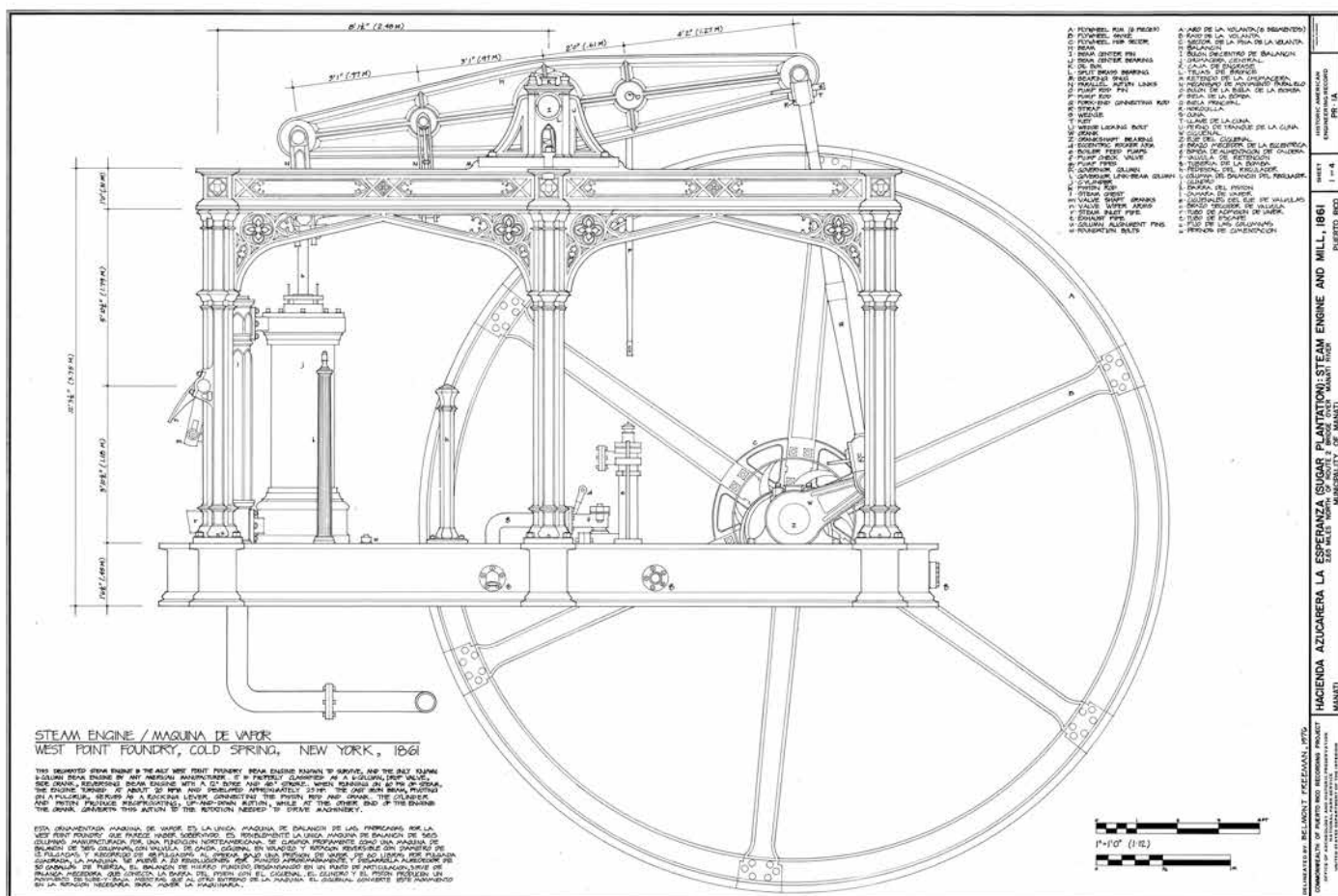
The Conservation Trust acquired the abandoned hacienda in 1975. It was listed on the National Register of Historic Places in 1978 and was named a National Mechanical Engineering Landmark by the American Society of Mechanical Engineers in 1979. The site was documented by the Historic American Engineering Record in 1976.

In its nomination the ASME described the steam engine at La Esperanza as a six-column, drop-valve, side-crank, beam engine with a 16-in. bore and a 40-in. stroke. The ASME also determined that the steam engine at La Esperanza was

unique in several respects: it is the only West Point Foundry beam engine to survive, it is the only known six-column beam engine made by an American manufacturer, and it is one of only eight beam engines of American manufacture known to still exist. And, today, it is the only functioning engine of its type powered by steam.

The hacienda is located in Manatí, on the north coast of the island about 35 miles west of San Juan. It was founded in the 1830s by Fernando Fernández. In 1861 his son, José Ramon Fernández y Martínez, installed the steam engine to run the *trapiche*. This innovation increased production from 200 tons per harvest to 500 to 600 tons, making it one of the largest sugar producers in Puerto Rico. The hacienda was once worked by as many as 170 slaves. After Spain emancipated slaves in 1873, sugar became a much less profitable crop, and the hacienda fell into decay. It is believed that the steam engine last ran in 1886 or 1887.

“Although our mission is the conservation of natural areas, it also seems important to us to rescue the human footprint that exists there. It is the story of how humans interacted with



HAER measured drawing of the La Esperanza steam engine, 1976.

nature,” Fernando Lloveras told *El Nuevo Día* about the importance of restoring the machinery. Lloveras is executive director of Para la Naturaleza, the division of the Conservation Trust which operates the site. “We are part of the ecosystem, and understanding our interaction with it is important,” Lloveras said.

In 2000 the Conservation Trust started planning for the restoration. The trust consulted with Puerto Rican and foreign experts to determine the details of how the steam engine and *trapiche* worked. Experts from the London Museum of Water & Steam (formerly Kew Bridge Steam Museum) came to advise on the operation of the steam engine. Cecil Huey, professor emeritus of mechanical engineering at Clemson University, helped with speed governor issues and assisted with the initial steam runs. Students from Worcester Polytechnic Institute researched boiler requirements and developed exhibit panels.

“There were times when we asked ourselves how we were going to do this, because we didn’t have the exact information [on this machine] we needed. We had to do a lot of research into similar machines. It was quite a challenge,” John Murphy told *El Nuevo Día*. Murphy is facilities coordinator for Para La Naturaleza, and also served as project manager for the restoration. The *trapiche* was operating by 2009, powered by a hydraulic pump. The total project cost is estimated at \$4 million.

The WPI students recognized that the steam engine would require a new boiler that met OSHA requirements. After research and consultation, Para La Naturaleza purchased a 35-HP vertical boiler from Columbia Boiler Co. The diesel fuel-fired boiler is installed in a maintenance building approximately 100 ft. from the machinery. The boiler operates at 60 PSI, which could generate 25 HP at 20 RPM, the speed at which the engine historically performed. Today, however, the engine will be operated at 10 RPM—about half-speed. The



El Nuevo Día

The steam engine and trapiche at La Esperanza.

gearing between the engine and *trapiche* will drive the latter at 2 RPM for demonstration purposes (crushing no sugar cane).

The students also researched and proposed five explanatory panels to mount around the steam engine and *trapiche* display. The topics they chose were steam power, the history of steam engines, the improved Watt steam engine, sugar mill technology, and slavery at Hacienda La Esperanza. Murphy said that Para La Naturaleza likes the proposed panels, but their installation is pending additional work at the site.

Steve Muller

IA ON THE WEB *(continued from page 6)*

Delaware & Raritan Canal, a 30-Year Retrospective (www.youtube.com, search on “Jim Amon: 30 Year Retrospective”). In 1974, Jim Amon became the first executive director of the D&R Canal Commission. This is a 56-min. video of a presentation he gave to the Canal Society of New Jersey. He reflects on the efforts to transform the abandoned canal into a successful state park.

Ethics of Dust (www.vam.ac.uk/designandpubliclife/projects/jorge-otero-pailos/). This website deals with a replica of Trajan’s Column which was made in the 1860s and is now on display at the Victoria & Albert Museum. The replica was made as a plaster cast affixed to a hollow brick column or “chimney.” New York artist Jorge Otero-Pailos views the chimney, made by British masons, as an artifact hidden in plain sight. He used conservation latex to clean the inside surface, removing dust and dirt accumulated over decades. He then displayed the latex and affixed dust, in effect the column inside-out, adjacent to the Trajan Column replica. Includes a 15-minute video of the process.

Frederick Gutekunst, Scenery on the Pennsylvania Railroad, c. 1875 (www.luminous-lint.com/app/vexhibit/_PHOTOGRAPHER_Frederick_Gutekunst_01/1/0/0/). An album of approximately 90 photographs document the Philadelphia, Middle and Pittsburgh Divisions. Locomotives, cars, bridges, tunnels, mills, furnaces, iron works, canals, and landscapes.

Green-Wood Cemetery (www.green-wood.com). The Green-Wood Historical Fund is devoted to the history and preservation of the famous New York cemetery, founded in 1838 and one of the first rural cemeteries in America. Information on visiting the cemetery and many interesting stories behind the markers and famous burials, many with an IA bent. Check the blog for a story titled *Pressure Gauge* about John Matthews (1808-1870), a manufacturer of devices to carbonate drinks.

IA on the Web is compiled from sites brought to the editor’s attention by members, who are encouraged to submit their IA Web finds: phsianews@aol.com. ■

IA ON THE NATIONAL REGISTER

The following is a compilation of industrial heritage and related sites listed on the National Register of Historic Places (U.S.) from Sept. 26 to Dec. 30, 2015.

American Radiator Co. Factory Complex, Buffalo, N.Y. A manufacturing and research facility that led the way in steam-heating technology. Buildings date from 1891 to 1939.

Apalache Mill, Greer, S.C. The original timber-frame cotton mill was built in 1837 and burned in 1902 to be replaced by a brick mill. The site includes a dam and powerhouse.

Balloon Hangar at Henry Post Army Airfield, Fort Sill, Okla. A 103-ft.-high, steel-frame hangar, built in 1934.

Bartlett Roundhouse, Bartlett, N.H. Six-stall, timber roundhouse, constructed by the Portland & Ogdensburg RR in 1887-88.

Bridge A 249, Cloudcraft, N.M. Timber trestle, completed in 1899 for the Alamogordo & Sacramento Mountains RR.

Calaveritas Creek Bridge, Calaveritas, Calif. Steel, Warren pony-truss, erected in 1928 and attributed to the Pacific Coast Steel Co.

Continental Powder Works at French Creek, East Parkland, Pa. Archeological site of a gunpowder mill, established under the direction of the Continental Congress in Apr. 1776. At its peak, the site produced two tons of gunpowder per week. It was destroyed in Sept. 1777 by advancing British forces.

Converse Mill, Spartanburg, S.C. Five-story brick cotton mill and warehouse, constructed in 1903 to a design by Lockwood, Green & Co.



Balloon Hangar at Henry Post Army Airfield.

Detroit News Complex, Detroit, Mich. The newspaper's building on W. Lafayette St. opened in 1917. It originally consisted of a newsroom, business offices, presses, and circulation operations. A paper storage warehouse was added in 1918-19, a garage was built in 1921, and a separate 5-story parking garage added across the street in 1924.

East Badger Creek Culvert, Winfield, Kan. Stone arch, erected in 1905-06.

El Camino Real de Tierra Adentro in New Mexico (1598-1881). Multiple Property Submission (MPS) for resources related to the Spanish colonial road system and later U.S. territorial roads.

English Mountain Fire Lookout Tower, Chestnut Hill, Tenn. A 60-ft.-tall, steel-frame tower, built in 1934 by the CCC. Tennessee Division of Forestry Lookout Towers MPS.

Great Bend Army Air Field Hangar, Great Bend, Kan. A timber hanger constructed in 1942-43.

H. Lauter Co. Complex, Indianapolis, Ind. A 5-acre furniture factory complex, dating from 1894 to 1936.

Hanover Shipwreck, Gibraltar, Wis. A wooden schooner, built in 1853 and lost in 1867. Great Lakes Shipwrecks of Wisconsin MPS.

Harbach & Sons Furniture Warehouse and Factory, Des Moines, Iowa.

Harper & McIntire Co. Warehouse, Cedar Rapids, Iowa. Reinforced-concrete, flat-slab warehouse, built in 1922. Industrial Development of Cedar Rapids MPS.

Hayden Co-Operative Elevator Co., Hayden, Colo. Grain elevator complex with a timber-frame elevator of 1917 and a pellet mill, processing plant, and steel grain bins, mostly from the mid-1950s.

Kentucky Buggy Co. Building, Owensboro, Ky. Italianate-style brick industrial building, constructed in 1901.

Kettlefoot Fire Lookout Tower, Mountain City, Tenn. Built by the CCC in 1936. Tennessee Division of Forestry Lookout Towers MPS.

Lamar-McKinney Bridge, Dallas, Texas. Concrete-encased, steel plate-girder bridge over the Trinity River, opened to traffic in 1932.

LCS-102 (Yankee Dollar), Vallejo, Calif. Landing Craft, Support, launched in 1945, is the sole intact representative of her class, basically a gunship of 158-ft.-length and 6-ft.

draft, used in the Pacific theater to provide close support before amphibious invasions.

Minburn Railroad Depot, Minburn, Iowa. Brick depot, built in 1914 by the Minneapolis & St. Louis RR.

Municipal Light Plant, Columbus, Ohio. Brick plant, dating from 1903.

Nashua Gummed and Coated Paper Co. Historic District, Nashua, N.H. Founded in 1849 as the Nashua Card & Glazed Paper Co., became a major manufacturer of gummed paper.

Norden Bombsight Storage Vaults, Great Bend, Kan. Concrete vaults, built in 1943, designed for the storage and issue of top-secret bombsights at Great Bend Army Air Field.

Palm Springs Tramway Valley Station, Palm Springs, Calif. Completed in 1963, the station for the aerial tramway was designed by architect Albert Frey in the “desert modern commercial” style. Architecture of Albert Frey MPS.

Parkside Candy Shoppe and Factory, Buffalo, N.Y. Mid-1920s complex consists of a retail showroom, daylight factory, and parking garage.

Pathfinder Shipwreck, Two Creeks, Wis. A 200-ft.-long wooden schooner, launched in 1869 and lost in 1886.

Petersburg Trailways Bus Station, Petersburg, Va. A streamlined Moderne-style bus station, built in 1946.

St. Alban’s Bay Culvert at Mille Lacs Lake, Garrison, Minn. Stone-faced culvert, erected in 1938-39. Federal Relief Construction in Minnesota MPS.

Santa Fe Depot, Oklahoma City, Okla. An Art Deco-style depot, built in 1934.

Santa Fe Freight Depot, Enid, Okla. A Classical Revival-style brick depot, built in 1924.

Saugatuck Pump House, Saugatuck, Mich. Small municipal pump house, built in 1904 for the town’s first public water system.

Shelburn Interurban Depot, Shelburn, Ind. Brick depot, built in 1920.

Shelby Cotton Mill, Shelby, N.C. This cotton mill opened in 1900 with expansions into the 1930s. It eventually employed over 20,000 spindles and 579 looms producing cotton sheeting.

Standard Coffee Company Warehouse and Factory, New Orleans, La. International-style concrete buildings, designed by architect Richard Koch in 1949.

Strutwear Knitting Co. Building, Minneapolis, Minn. A seven-story, Art Deco-style factory, nominated for its historic association with a labor action in 1935-36 during which 900 female operatives of the American Federation of Hosiery Workers proved crucial to the strike’s success.

Success Shipwreck, Sevastopol, Wis. A wooden scow schooner, a subclass of sailing vessel for transporting bulk cargo on the Great Lakes, was launched in 1875 and lost in 1896. Great Lakes Shipwrecks of Wisconsin MPS.

Stuyvesant Motor Co. Building, Cleveland, Ohio. Constructed in 1911, the building originally housed the carmaker’s production plant, service center, and garage.

U-576 and Bluefields Shipwrecks, Hatteras, N.C. The German U-boat sank the freighter *Bluefields* on July 15, 1942, only moments later to be sunk itself by a U.S. Navy Kingfisher aircraft about 30 miles off Cape Hatteras.

U.S. Army Publications Distribution Center, St. Louis, Mo. A complex of buildings on a 78-acre campus was constructed in 1953 to consolidate the storage and distribution of Army publications.

Virginia Metalcrafters Historic District, Waynesboro, Va. This manufacturer specialized in monumental artwork and architecture as well as historic reproductions. The brick factory dates to 1925 and was originally constructed for Stehli Silk. Virginia Metalcrafters acquired the property in 1940.

W. G. Swann Tobacco Co., Murray, Ky. Brick tobacco warehouse, built in 1925.

The Wireless Station, Anchorage, Alaska. Radio station, established in 1917, to facilitate communications for the construction of the Alaska RR. ■



HAER TX-90

Lamar-McKinney Bridge, Dallas, Texas.

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

SITES & STRUCTURES

The *Delta Queen*, after six years at dock in Chattanooga, Tenn. will be moving to Kimmswick, Mo., a small river town south of St. Louis. Officials hope to have the steamboat back in service in 2016, but to allow her to return to overnight cruising, because of her wooden superstructure first secure a congressional exemption.—*S&D Reflector* (Dec. 2015)

Finding a long-term preservation solution for the **S.S. United States** (*SIAN*, Fall 2014) remains an elusive goal, but preservationists were heartened in late 2015 when an

outpouring of donations saved the famed ocean liner from the scrappers. The S.S. United States Conservancy, which purchased the ocean liner in 2011, has been seeking investors interested in re-using the ship as a stationary, mixed-use real estate project. Several schemes have fallen through and cash was so short last year that the conservancy had actually sought bids for scrapping her. A last-ditch fundraising effort unexpectedly raised \$600,000 and bought the 990-ft.-long ship at least another year at dock in Philadelphia. The publicity created new momentum, and there have been renewed overtures from prospective developers. The *United States*, considered a pinnacle of American liner design and construction, was launched in 1952 and to this day holds the Blue Riband for the fastest transatlantic crossing. Info: www.savetheunitedstates.org.

The future is somewhat brighter for the **S.S. Columbia**, which is currently undergoing restoration at a shipyard in Kingston, N.Y. Built in 1902, the 207-ft.-long vessel ferried passengers from downtown Detroit to an amusement park on Canada's Bois Blanc Island (known as Boblo). The steamer ceased service in the early 1990s. During the second half of 2015 she was towed to Kingston via the New York State Barge Canal. When restoration is complete, current planning suggests she may begin a new life as an excursion ship running between New York City and Albany. To learn more or support the S.S. Columbia Project, www.sscolumbia.org. ■



S.S. Columbia in a view from c. 1908.

Detroit Publishing Co., Library of Congress

CONFERENCES & WORKSHOPS

The **6th International Early Railways Conference** will be held in Newcastle-upon-Tyne, England, June 16-19, 2016. Organizers define early railways as pre-main-line often described as wagon ways, plate ways, tram roads, or industrial railways. The topics of the papers will be wide-ranging: from national and regional studies to those of individual lines; the analysis of archeological investigations; far-reaching themes of finance, administration, usage, technology, and engineering; and with dates from the medieval period to the late-19th century. The papers will present new and previously unpublished research. Newcastle was at the heart of the Great Northern Coalfield, which by 1800 had over 500 miles of wagon ways moving a million tons of coal a year. Here too was the nursery of the steam locomotive, developed by local figures such as Hedley & Hackworth, Buddle & Chapman, Nicholas Wood, John Blenkinsop and, most famously, George and Robert Stephenson. Today Newcastle is a fascinating, vibrant city that has retained its distinct regional character. Its riverscape is one of the most dramatic in Britain. Beamish Museum is nearby, with its

working replicas of *Locomotion*, *Steam Elephant*, and *Puffing Billy*. Close too are Wylam, Hetton, Killingworth, the Bowes Railway and many other well-known early railway features, together with the World Heritage sites of Durham and Hadrian's Wall. Info: early.railways.conference@gmail.com; www.earlyrailways.org.uk. ■



Northumberland Archives

"The Coal Waggon."

NOTES & QUERIES

Haon Family DuPont Company Records have been opened for research at the Hagley Museum & Library, Wilmington, Del. These corporate records were collected by father and son executives Harry J. Haon II (1901-1989) and Harry J. Haon III (1934-2013). Haon II was a chemist who was promoted to Manager of DuPont Europe in 1952. His papers include valuable information about DuPont's European operations before and after WWII. Haon III was a product technologist in the Teflon group. His papers contain marketing materials for Aldyl piping and Teflon. Info: www.hagley.org/librarynews/manuscripts-and-archives-haon-family-dupont-company-records-open-research.

Hagley has also received a donation of papers from the **Edward Lowe Foundation**. Lowe (1920-1995) was a pioneer in the development of the cat box filler industry and inventor of clay-based **Kitty Litter** in 1947. Prior to Kitty Litter, most domestic cats went outdoors although some owners used ashes and sand in rudimentary litter boxes. The invention has been credited with enabling owners to keep more cats indoors. Today, cat litter is a billion-dollar

a-year industry.—*Hagley Collection & Research News* (Oct. 25, 2015)

Among nine new historical highway markers recently approved by the Va. Dept. of Historic Resources are signs to highlight the history of industry in Surry County. Two markers will recall **Surry Lumber** and the **Surry, Sussex & Southampton Ry.** Surry Lumber was chartered in 1885 and became “among the largest producers of yellow pine lumber on the East Coast,” according to the marker's text. The company constructed sawmills, box mills, dry kilns, employee housing, and a commissary that gave rise to the town of Dendron. The company's mills closed in 1927 when its timber supply was depleted. A related marker for the lumber company's railway will note that it eventually extended 28 miles, running from Scotland Wharf on the James River, and passing through Dendron and Wakefield before terminating at Dory, a logging camp. The narrow-gauge railway ceased operations in July 1930. SS&S No. 6, an 1891 Baldwin 2-6-0 locomotive, is preserved and operated by the Midwest Central RR in Mount Pleasant, Iowa (www.mccr.org/pages/six.html)—*VDHR Press Release* (Jan. 5, 2015) and Tyler Turpin ■

MEMBER NEWS

Robert Kapsch has been named the recipient of the 50th anniversary American Society of Civil Engineers (ASCE) History and Heritage Award. The award was established to recognize contributions toward a better knowledge of, or appreciation of, the history and heritage of civil engineering. Kapsch was selected for his outstanding leadership in documenting civil engineering by the Historic American Engineering Record (HAER), for his numerous books and articles on historic American canals and railroads, and for his continuing service to ASCE on Section and National History and Heritage Committees. Kapsch's

recent books on civil engineering history include *Over the Alleghenies: Early Canals and Railroads of Pennsylvania*; *Historic Canals and Waterways of South Carolina*; *The Potomac Canal: George Washington and the Waterway to the West*; *The Monocacy Aqueduct*; and *CANALS*. Kapsch, a 36-year member of the SIA, joins other members who have received this award, including Emory Kemp, Abba Lichtenstein, Donald Sayenga, and Robert Vogel. The first award, made in 1966, was to James Kip Finch. A complete list of award recipients is included on the ASCE website (www.asce.org/history/). ■

CHAPTER NEWS

Oliver Evans (Greater Philadelphia) presented *Lost Islands of the Delaware*, an illustrated lecture by environmental historian Adam Levine, on Dec. 7, 2015. Levine discussed his research on Smith's and Windmill islands, located in the river between downtown Philadelphia and Camden, which had various uses for industry and recreation before being dredged away by the Army Corps of Engineers in the 1890s.

Southern New England Chapter members met in Williamsburg, Mass. on Sept. 26 for a tour of the Mill River Valley. The tour began in the historic 1841 Old Town Hall, now home to the Williamsburg Historical Society, followed by a visit to the Hiram Hill Grist Mill. This small water-

powered mill was built c. 1881 to replace an earlier one that was destroyed in an 1874 flood. It operated until 1925 and is now home to the society's Farm Equipment Museum. The annual business meeting was held on Oct. 17 at the New England Steam & Wireless Museum in East Greenwich, R.I. The meeting coincided with the museum's annual “Yankee Steam Up.”

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

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CALENDAR

2016

- Apr. 6–10:** Society of Architectural Historians Annual Conference, Pasadena, Calif. Info: www.sah.org.
- May 18–20:** Iron & Steel Preservation Conference & Workshop, West Lafayette, Ind. Repair, rehabilitation, and restoration of historic metals. Held at Purdue University, S-BRITE Center Bridge Component Gallery. Info: Vern Mesler, meslerv@gmail.com; (517) 614-9868.
- May 18–21:** Early American Industries Assn. Annual Conference, Harrodsburg, Ky. Held at Shaker Village of Pleasant Hill. Info: www.earlyamericanindustries.org.
- May 25–29:** Railway & Locomotive Historical Society Annual Meeting, Moscow, Idaho. Info: www.rlhs.org.
- May 26–29:** Construction History Society of America, 5th Biennial Meeting, Austin, Texas. Info: www.chsa-5thbiennial.org.
- June 1–4:** Vernacular Architecture Forum Annual Conference, Durham, N.C. Info: www.vafweb.org.
- June 2–5:** SIA 45th ANNUAL CONFERENCE, KANSAS CITY, MO. Members will be sent registration materials and tour itinerary in March. Info: www.sia-web.org.
- June 9–16:** Mining History Assn. Annual Conference, Telluride, Col. Historic mine, mining area, and hydroelectric plant tours. Info: www.mininghistoryassociation.org.
- June 16–19:** 6th International Early Railways Conference, Newcastle-upon-Tyne, England, U.K. See article in this issue. Info: www.earlyrailways.org.uk.
- June 22–26:** Society for the History of Technology (SHOT) Annual Conference, Singapore. Info: www.historyoftechnology.org.
- July 28–31:** Petroleum History Symposium, Casper, Wyo. Paper sessions and field trips to the Black Gold Byway, Salt Creek oil field, and Teapot Dome. Info: <http://petroleumhistory.org>.
- Sept. 4–9:** Assn. for Industrial Archaeology Annual Conference, Telford, U.K. Tours include Grange Colliery, Wappenshall Canal basin, Iron Bridge, and Ditherington Flax Mill. Info: <http://industrial-archaeology.org>.
- Oct. 20–22:** Society for the Preservation of Old Mills (SPOOM) Annual Conference, Dayton, Ohio. Info: www.spoom.org.
- Oct. 30–Nov. 2:** Assn. for Preservation Technology International Annual Conference, San Antonio, Texas. Info: www.apti.org.