

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

Volume 39 Spring 2010 Number 2

WORLD TRADE CENTER STEEL MAKES A HOMECOMING

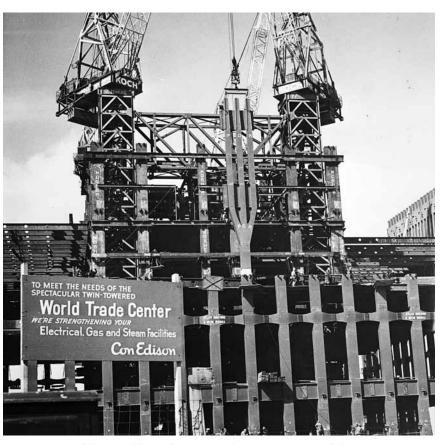
orty-one years ago, a trainload carrying the structural shapes (known as trees) destined for the World Trade Center in New York City pulled out of Lukens Steel in Coatesville, Pa. (tour site–2004 SIA Fall Tour, Wilmington, Del.). The trees were to frame the first nine floors and soaring lobbies of the North and South Towers of the world's tallest buildings at that time. As the horrors of 9/11 unfolded, it was the lasting images of the trees still standing which etched an indelible image

in the minds of those who viewed them. The trees became icons of the tragedy. Little could anyone fathom in 1969 that those same trees would return to Coatesville to become the centerpiece of the National Iron & Steel Heritage Museum, no longer simply unusual steel shapes but respected relics of one of our nation's worst disasters.

The 28-truck convoy carrying the trees arrived in Coatesville, within the confines of the Lukens National Historic District, on April 15. The trees' arrival was greeted

by crowds lining the streets and a distinguished procession into the city. A welcoming ceremony was hosted by the Graystone Society, which was created in 1984 to help preserve the city's historic architecture and assist with municipal improvement and economic development through preservation. The president of the society, Scott G. Huston (a direct descendent of Rebecca Lukens, a founder of the Lukens Steel Company 200 years ago), chaired the event. "It's our goal," said Huston, "to honor those who lost their lives on 9/11, as well as the steelworkers who created the steel for these monumental

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Construction of the World Trade Center, showing erection of the trees, c. 1969.

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The 28-truck convoy returns the trees to Coatesville, Pa.

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.

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

buildings during the 1960s. We feel that it is only fitting that these trees become the keystone of the National Iron & Steel Heritage Museum, especially as the 10th anniversary of 9/11 draws near." The Graystone Society is named for the Graystone Mansion, a late-19th-century Gothic-style dwelling built for one of the daughters of Rebecca Lukens.

The new museum is a key element in the rebirth of this storied steel town and architecturally rich city. Coatesville recently broke ground for a new high-rise Marriott Hotel and a meandering River Walk, which will take pedestrians past vistas of the Brandywine River and of Lukens Steel. The National Iron & Steel Heritage Museum, which is well on its way to realization, will be located in the Lukens National Historic District and is intended to educate the public on the people, places, products, and processes of steel making. A committee is

now being formed by the Graystone Society to oversee the design and construction of a memorial incorporating the steel trees into the district's landscape.

This summer will mark 200 years of the iron and steel industry in Coatesville. In 1810, an expectant mother was forced to take over her husband's iron plate mill after keeping a deathbed promise to him. Rather than shy away from her responsibility, Rebecca Lukens embraced her role as manager of the company in a time when women of her status were primarily occupied with housework and child rearing. Her Quaker background and conviction helped her create the framework for what eventually would become the Lukens Steel Company.



Interior view at Lukens Steel, c. 1969.

SIA Fall Tour, Sept. 16-19 • Montpelier and Barre, Vt.

We will visit industrial heritage sites in Montpelier, Barre, and nearby towns during SIA's 2010 Fall Tour. Thursday's tour will be to the American Precision Museum where we'll learn about the machine tool collection and the recent project to document the water-wheel pit. We will next walk to the Cornish-Windsor Bridge and then have a tour of the Harpoon Brewery and several other sites of IA interest. Thursday night's opening reception will be held at the Barre Granite Museum. A choice of two tours will be offered on Friday: one will be to active granite quarrying and finishing operations, the second to iconic Vermont industries

including dairying, saw milling, and hydropower generation. Saturday's two tours offer a choice of either Burlington (Shelburne Museum, Burton Snowboard Factory, Magic Hat Brewery) or the Elizabeth and Ely Copper Mines. The Saturday evening banquet will be in Barre's Socialist Labor Party Hall. Accommodations will be in the dormitories of the Vermont College of Fine Arts in Montpelier. It is the fall leaf viewing season, so no blocks of rooms were available at hotels or inns. Rooms will need to be prepaid with tour registration. Registration materials will be sent to all members later this summer.



The steam ferry Ticonderoga is a centerpiece of the Shelburne Museum, a site on the 2010 SIA Fall Tour to northern Vermont.

SIA Annual Conference, May 2011 • Seattle, Wash.

The Seattle host committee has begun preparations for a memorable conference to the Pacific Northwest, a first for the SIA. The Seattle area, with its long tradition of engineering and manufacturing, is an ideal place for the conference. Attendees will tour bridges and hydroelectric plants, and facilities related to air-

craft manufacture, shipbuilding, specialty food-and-beverage production, and other industrial processes. Sponsorships are available, as well as other opportunities to participate. To reach the host committee, contact Julie Koler, (206) 999-2383, *Julie.koler90@gmail.com*.

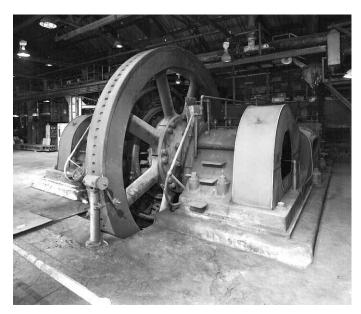
HAER VT-4

Corliss Engine Preserved in Youngstown

In December 2009, Severstal Wheeling, Inc., owner of the former Wheeling Pittsburgh Steel Corporation plants in the Ohio and Monongahela river valleys, donated to the Youngstown Steel Heritage Foundation a 26-in. x 54-in. x 48-in., horizontal, cross-compound, Corliss, electric generating engine from the No.1 power house at the Steubenville North plant. This engine, built in 1905 by Westinghouse Machine Co., drove a 1000 kW, 250v, DC generator, providing the power to operate the overhead cranes and ore bridge at this integrated steel plant. The engine is equipped with an 18-ft.-diameter flywheel and weighs an estimated 150 tons.

The YSHF has begun dismantling the engine and plans to move it to the Tod Engine Heritage Park in Youngstown, Ohio, where it will join the organization's William Tod Co. 34-in. x 68-in. x 60-in., cross-compound, rolling mill engine (tour site–2006 SIA Fall Tour, Youngstown). Plans are in the works to construct a full foundation under the Westinghouse Corliss and to restore it to operating condition. Removal of the engine from the power house will require some interesting rigging procedures as the power house is not equipped with overhead crane, and the existence of high-voltage transmission lines and cramped quarters limit the usefulness of hydraulic cranes. As has been the organization's custom, YSHF volunteers will perform the entire dismantling and rigging out of the engine, saving tens of thousands in professional rigging fees.

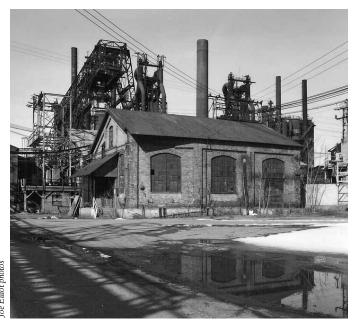
The preservation of the engine has had several positive side benefits, one of which has been the photo documentation of the Steubenville North plant to Historic American



Westinghouse Corliss generating engine inside the No. 1 power house at Severstal Wheeling's Steubenville North plant.

Engineering Record standards. In March 2010 photographer Joe Elliott took 35 4x5 in., black-and-white images of the two blast furnaces, ore yard, Westinghouse Corliss, and other extant structures. A set of these photos will be submitted to HAER. This photo project was funded entirely by

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The No. 1 power house at the Steubenville North plant



The blast furnaces at the Steubenville North plant.

CORLISS ENGINE (continued from page 4)

YSHF supporters. An individual photo could be sponsored for \$30, and within four days of the announcement of the program all 35 photos had been sponsored. The YSHF plans to repeat this strategy and is working on securing permission to document the Severstal South plant and the former Weirton Steel hot end.

As another side benefit of this project, the YSHF has been granted access to Severstal Wheeling's drawing vaults, which contain linen drawings of the original construction of the La Belle Iron Works Steubenville plant and the Carnegie Steel Co. Mingo Works. Hundreds of drawings have been digitally scanned thus far. A great deal of history of both plants has been uncovered through the study of these engineering drawings, including the realization that well over half of the extant structures at the Steubenville North plant dates back to the original construction of the facility in 1903-1905.

The YSHF has begun publishing a quarterly newsletter, *Down at the Mill*, available to members of the organization. Prospective members can join by visiting *www.todengine.org*.

CONFERENCES & WORKSHOPS

World Canals Conference 2010 will be held in Rochester, N.Y., Sept. 20-24. The event will feature about 80 paper presentations and panel discussions by delegates representing 16 countries with canals and navigable inland waterways including Belgium, Benin, Canada, China, France, Germany, India, Ireland, Italy, Netherlands, Norway, Panama, Serbia, Sweden, the U.K., and U.S. There are also an ample number of study tours of operating and retired canal sites throughout western New York. Registration (\$495 through July 15, \$575 thereafter) includes all sessions, tours, events, and most meals. Lodging and postconference tours are extra. WCC typically meets in Europe during odd-numbered years (last year was Serbia, next year is the Netherlands) and in North America during even numbered years. (The last time in North America was at Kingston, Ont. on the Rideau Canal in 2008.) China won the bid to host WCC 2012 and Korea is in play, so it may be

Library of Congress , Detroit Publishing Co. photo collection

The Erie Canal (shown here, Rochester, N.Y., c. 1906) will be featured at the World Canals Conference, Sept. 20-24, 2010.

some years before the conference returns to North America. As an aside, on March 15, the New York State Legislature celebrated the bicentennial of New York's original Canal Commission by declaring it Erie Canal Day. On March 15, 1810, a resolution passed the Assembly appointing a Canal Commission and authorizing the survey of a route that would eventually become the Erie Canal. Info: www. wccrochester.org.

Adventures in Preservation is a non-profit organization that has been supporting community-based heritage preservation projects since 2002. One- and two-week hands-on volunteer vacations provide an opportunity to travel and learn preservation skills with a technical expert at a historic site, learning practical historic preservation skills and techniques, and immersion in the history and culture of the area. Workshops include building conservation projects in Illinois, Montana, New York, Armenia, Slovenia, Albania, and Kenya. Info: www.adventuresinpreservation.org; (303) 444-0128.

Business History Conference, Call for Papers. The BHC will hold its annual meeting in St. Louis, March 31-April 2, 2011. The conference theme will be "knowledge." The history of business has for millennia been entwined with the pursuit and acquisition of knowledge. Artisans have jealously guarded trade secrets; merchants have networked to improve access to information on market trends; promoters have fostered business education; scientists and engineers in corporate labs have devised innovative technologies, etc. The program welcomes a diversity of paper proposals that explore the intersection of business practices and knowledge. Potential presenters may submit proposals for individual papers or entire panels. Individual paper proposals should include a one-page (300-word) abstract and a one-page c.v. Panel proposals should include a cover letter stating the rationale for the panel and the name of its contact person and a one-page abstract and c.v. for up to three presenters. Please send proposals to BHC2011@Hagley.org.

New SIA Events Coordinator—Ron Petrie

First, thanks to Bode Morin, who has been SIA's Events Coordinator for several years and has helped make a success of both our Annual Conferences and Fall Tours. It's now "Bode Morin, PhD," as he has completed the doctoral program at Michigan Tech. As Bode entered into the final stages of his academic work, the SIA Board of Directors began a search for a new Events Coordinator.

After receiving inquiries from several well-qualified candidates, the search committee began interviews. At least two committee members interviewed each candidate. On Feb. 28, the committee presented its recommendations to the board and received unanimous approval to select Ron Petrie as our new Events Coordinator.

Ron has been a member of the SIA since 1993, and currently serves as Treasurer of the Northern Ohio Chapter. He notes, "It seems like only yesterday we were attending SIA tours with one or two children in tow, but the kids are now adults." He grew up in Detroit and attended universities in Canada, completing an MBA from the University of Toronto in 1981. For the past 25 years he has lived in Cleveland, and pursued a varied career combining financial analysis with public relations.

He was also a part-time college professor. Ron and his wife, Corinne, have planned and managed work-related conferences, professional seminars, and events for historical societies. Both look forward to working as a team to plan successful events for the SIA.



New SIA Events Coordinator Ron Petrie and his wife Corinne.

IA ON THE WEB

California's Last Auto Plant (http://online.wsj.com/public/resources/documents/Californias-last-auto-plant.html). In a five-part video series, University of California at Berkeley journalism graduate students document the April 2010 closing of New United Motor Manufacturing, Inc. (NUMMI), a Toyota-GM joint venture in Fremont, and its impact on families and suppliers in the surrounding communities.

Dead Malls (www.deadmalls.com) documents the abandonment and destruction of U.S. shopping centers, along with the demise of the retail chains that inhabit them.

Forgotten Chicago (http://forgottenchicago.com/chicago-industry). This website was founded in 2007 by four Windy City residents whose goal is to discover and document little known elements of Chicago's infrastructure, architecture, neighborhoods, and general cityscape, whether existing or historical. The industry section includes before-and-after comparisons of U.S. Steel's South Works.

Historic Bridge Photos (www.northcountrypublicradio. org/arts/bridges/#). Upstate New York photographer Mark Kurtz's recent exhibit features a series of bridges from around the Adirondack region.

Society for the History of Technology (www.historyoftechmology.org) each month adds a new example to its "People and Their Technology" feature. In March 2010, the new example was a digitized version of a 1929 film made by Steinway & Sons on the manufacture of pianos. The examples are meant to stimulate thinking about where and how to find unusual historical sources of information about technology.

Textile Industrial Revolution in N.C. (www.textilehistory.org/IndustrialRevolutionNC.html) features a timeline (1813-1960s) and historical background on a number of mills including Allamance Cotton Factory, Granite Falls; James H. & E.A. Holt, Bellemont; and Glencoe. ■

"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.

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COMPILED BY

Mary Habstritt, New York, NY., Justin Spivey, Oakland, Calif., and Patrick Harshbarger, SIAN editor, Wilmington, Del.

GENERAL INTEREST

- Conor Dougherty. This Museum Exposes Kids to Thrills, Chills, and Trials. Wall Street Journal (May 1, 2010). The City Museum of St. Louis features activities like a 3-story slide, a jungle gym, and a rooftop Ferris wheel, much of it manufactured from recycled industrial artifacts, such as assembly line rollers, reinforcing bars, and storage drums. Children enjoy the activities, but there is an element of risk. Several visitors have been seriously injured.
- Thomas Geoghegan. Consider the Germans. Harper's Magazine (Mar. 2010), pp. 7-9. This editorial posits that works councils and co-determined corporate boards, imposed on German industry by the U.S. in the wake of World War II, have created a different and possibly more sustainable form of capitalism.
- Nancy Groce. Lox, Stocks, and Backstage Broadway: Iconic Trades of New York. Smithsonian Institution Scholarly Pr., 2010. 272 pp. \$29.95. Profiles Rosenwach Tank, maker of wooden rooftop water tanks, and such other typically New York manufacturers as a lox smoker and a bialy baker as well as those who keep the subway running. Book grew out of interviews conducted for the New York Project of the Smithsonian's Center for Folklife and Cultural Heritage. Excerpts can be found online on the website of The Hundred Year Assn. of New York at http://100yearassociation.com/2010/03/a-look-at-some-of-new-yorks-iconic-trades/.
- Richard Hartree [SIA]. John Penn and Sons of Greenwich. Self-published. Avail. from author: Stables Cottage, Sibford Ferris, Banbury OX15 5RE, UK or richard@hartree.org.uk. 128 pp., illus. £14.99. Major engineering firm, founded in 1799 by John Penn, a millwright from Somerset, became the leading supplier of marine steam engines to the Royal Navy and contributed significantly to the development of steam navigation. It lasted through 1899 as a family business.
- Stephen [SIA] and Melissa Heaver. Baltimore Builders: Fire Apparatus Makers of Baltimore from 1823 to 1964. Fire Museum of Maryland, 2010. 140 pp. \$39. A chapter on each of the twelve hand, steam, and motor manufacturers including John Rodgers, Poole & Hunt, and Chas. T. Holloway. Heavily illustrated and a color photo section. Avail.: www.firemuseum-md.org.
- ◆ Roger G. Kennedy & David Larkin. When Art Worked: The New Deal, Art, and Democracy. Rizzoli, 2009. 368 pp., photos. \$75. While the focus is on the objectives of the New Deal programs which employed artists, writers, architects, and craftspersons, the 450 photos document their work which often trumpeted industrial advances and glorified the worker.
- Carol McShane and Joel A. Tarr. Living Machines: The Horse

- in Ohio Cities. *Timeline*, Vol. 27, No. 1 (Jan.-Mar. 2010), pp. 34-53. A look at the wide-ranging extent of reliance on horses for transportation from the mid-19th to the early 20th century. Includes discussion of horse-drawn vehicles, breeding, training, care, and manure.
- Bode Morin [SIA]. US Heritage Conflicts with Environmental Mediation. TICCIH Bulletin, No. 47 (Spring 2010), p. 4.
 Succinct discussion of the inherent tension between federal historic preservation and environmental remediation laws as applied to contaminated industrial heritage sites.
- Society for Industrial Archeology, New England Chapters Newsletter, Vol. 30, No. 2 (2009) includes Bruce Clouette. The Tobacco Barn as Machine (operations of Connecticut Valley barns); Bruce Clouette, Rails to Trails to Industrial Archeology (station, bridges, and culverts of the former Canal Line railroad in Southington, Conn.); and Richard Casella, United States Coast Guard Academy Pier & Marine Structures (historic evaluation and documentation). Vol. 31, No. 1 (2010) includes Faline Schneiderman-Fox, Minterburn Mill, Rockville, Connecticut (history of the former woolen mill complex, built 1906, on site of several earlier mills); Gretchen E. Yarnall, The Matthews and Willard Factory, Waterbury, Connecticut (late-19th-c. manufacturer of mostly stamped-brass products); and Faline Schneiderman-Fox, The Remington Rand Complex, Middletown, Connecticut (originally the Keating Wheel Co., bicycle manufacturer, built in 1896, eventually transitioned to Remington typewriters).
- Thomas Spencer. Book Reveals How Black Inmates Entered Bondage for Birmingham's Mines, Plants. Birmingham (Ala.) News, Feb. 7, 2010. Jack Bergstresser leads tour of unmarked graveyard where hundreds, perhaps thousands, of blacks were buried. The men in these graves were convicts forced to work in the coal mines near Pratt City. The convict labor system is a central theme of author Douglas Blackmon's new book Slavery by another Name: The Re-Enslavement of Black Americans from the Civil War until World War II, which won the 2009 non-fiction Pulitzer Prize. The book is being turned into a PBS documentary. Additional info: www.slaverybyanothername.com.
- ◆ TICCIH Bulletin No. 48 (2010) includes a roundup of industrial heritage news from around the world as well as feature articles by Sebastien Abot, Saving Dieppe's Swing Bridge (the Colbert Bridge in the French port of Dieppe was built in 1889); and Ruth Keller and Ulrich Stahn, Preserving Objects as Tangible Witnesses of Industrial Culture (description of the Berlin University of the Applied Science's conservation program).
- The Wonders of Machinery Hall, World's Columbian Exposition-Chicago 1893. Lindsay Publications, 2007. 192 pp.,

illus. \$16.95. A collection of articles and illustrations reprinted from 1892 and 1893 issues of *American Machinist Magazine*, *Shepp's World's Fair Photographed*, and several others. The Machinery Hall had 14 acres of floor space and was one of the greatest machinery expositions of all time. The star attraction was the giant engine built by E. P. Allis & Co. of Milwaukee.

AUTOMOBILES & HIGHWAYS

- Automobiles 1913-15. Lindsay Publications, 2003. 160 pp., illus. \$16.95. A series of articles reprinted from American Machinist Magazine reveal the tools and production techniques of the automobile industry in the mid-1910s. Includes descriptions and views of the shops of Crane, Winton, Hupp, Studebaker, Cadillac, White, Pierce-Arrow, Ford, and others.
- A. G. Sulzberger. Iconic Checker Cab Company Shuts Down. NY Times (Jan. 14, 2010). The Checker Motors Co. of Kalamazoo, Mich., stopped making the boxy Checker Cabs nearly 30 years ago. It then evolved from an independent car maker to a manufacturer of car parts for GM, but the familyowned business established in 1922 went bankrupt in early 2010.

POWER GENERATION

- Terrell Croft, ed. Steam-Engine Principles & Practice. Library of Power Plant Practice, 1922; Lindsay Publications, reprint ed., 2008. 513 pp., illus. \$34.95. Reprint of what many consider a classic in how to operate steam engines from setting Corliss valves to rebabbitting bearings.
- David Gargill. The General Electric Superfraud: Why the Hudson River Will Never Run Clean, Harper's Magazine Vol. 319, No. 1915 (Dec. 2009), pp. 41-51. While focusing on the politics of current efforts to clean up polychlorinated biphenyl (PCB) contamination, this article also includes a brief history of General Electric's capacitor and transformer manufacturing operations in Hudson Falls and Fort Edward, N.Y., and Pittsfield, Mass.
- Richard Martin. Uranium Is So Last Century–Enter Thorium the New Green Nuke. NY Times (Dec. 21, 2009). Historical background and resurgence of interest in thorium as an alternative to uranium in fueling nuclear reactors. In the mid-1950s, American scientists built a working thorium-fueled reactor at Oak Ridge National Lab. A thorium reactor produces less long-lived waste than does a uranium reactor. The U.S. Government abandoned its experiments with thorium in part because it could not be used to produce weapons-grade material.
- ◆ Frank Munger. 13 ORNL Reactors Reveal History. Knoxville (Tenn.) News (Nov. 1, 2009). Retired Deputy Director Munger of the Oak Ridge National Laboratory has prepared a new report on the history of each of the 13 reactors built at the lab beginning with the Graphite Reactor in WWII. During the 1950s and 1960s, the lab had as many as eight reactors running at the same time. Also, What's the Future of Oak Ridge's Past (Jan. 25, 2010) describes National Park Service (NPS) study to establish a Manhattan Project National Historic Park. The NPS has recommended a park with the preferred site at Los Alamos, N.M., and does not support similar parks at Oak Ridge, Tenn., or Hanford, Wash., the two main production sites for the first atomic bombs. Local preservationists are challenging the recommendation.
- ◆ Elizabeth Rosenthal. **Solar Industry Learns Lessons in Spanish Sun**. *NY Times* (Mar. 8, 2010). Puertollano, historically a coal-mining city, has set out to replace its failing coal economy with solar power. Half the solar power installed globally in 2008 was in Spain.

- Mark Schapiro. Conning the Climate: Inside the Carbon-Trading Shell Game. Harper's Magazine (Feb. 2010), pp. 31-39. Explores the infrastructure of greenhouse gas emissions trading, which relies on a network of validators paid by emitters but reporting to the U.N. Clean Development Mechanism. The validators, including Norwegian shipping inspector Det Norske Veritas and German industrial testing firm TÜV SÜD, are tasked with proving counterfactual claims that development projects result in the emission of fewer greenhouse gases.
- Neil Wexler. The PowerHouse–BIM to the Future. MSC (Feb. 2010), pp. 24-27. While acknowledging the significance of the Pennsylvania RR power station in Long Island City, N.Y., the author claims that its complete demolition "would have saved \$40 million" relative to the current renovation, which included removal of its iconic smokestacks in 2005. The article describes the use of building information modeling (BIM) for design and construction of a rooftop addition by architect Karl Fischer.

IRON & STEEL

- ◆ Tom Abate. New Factory in Pittsburg Is No Pipe Dream. San Francisco Chronicle (Nov. 3, 2009), pp. DC-1. Production started at a new, \$130-million spiral-welded steel pipe plant in Pittsburg, Calif. The new plant is a joint venture between U.S. Steel and two South Korean companies, Posco and SeAH.
- Alexander Berzon. Jury Is Still Out on Bethlehem's Bet. Wall Street Journal (Apr. 7, 2010). Five years ago a casino was built on the site of Bethlehem, Pa.'s historic steel mill (tour site–2002 SIA Fall Tour, Lehigh Valley). The casino has not lived up to expectations for the city's economic revitalization, including the creation of an ambitious steel heritage museum.
- Aaron Brown. Overburden: Modern Life on the Iron Range. Duluth: Red Step Pr., 2008. 232 pp. \$16.96. Chronicles contemporary life on the Mesabi Range of Minnesota, where residents struggle to exist among the cultural, institutional, and social vestiges of the area's mining past. Rev.: Minnesota History (Spring 2010). p. 40.
- ◆ Alan T. (Ted) Sheppard. Innovation in Steel Erection. MSC (Apr. 2010), pp. 97-98. This fascinating, albeit jargon-heavy, piece of oral history documents Sheppard's successes in using custom steel erection equipment designed and built in-house at Tri State Steel Construction and Bethlehem Steel. Historic photographs show a "jinniwink" crane on a bridge, a jumping crane in Detroit, and erection of an unidentified blast furnace.
- Ethan Vial. Thermit Welding. Lindsay Publications, 2009. 96 pp., illus. \$9.95. Reprints a series of articles originally published under the title of Modern Welding and Cutting in American Machinist Magazine beginning in Feb. 1919. Thermit welding ignited a mixture of powdered aluminum and ferric oxide at very high temperature in a crucible. It produced a lot of slag and molten steel that was routinely used for welding railroad rail, broken crankshafts, large castings, etc.
- Darrin Youker. "Freedom" on an Iron Plantation. Preservation Magazine (Mar. 15, 2010). www.preservationnation.org. Compelling evidence that Pennsylvania's Hopewell Furnace, which operated from 1771 to 1883, hired African-American workers and also served as a stop for fugitive slaves on the Underground Railroad.

BUILDING & STRUCTURES

◆ Ben Raines. Preserving Middle Bay Light: Inspection Finds the Lighthouse Structure Is about 90 Percent Original. Press-Register (Mobile, Ala.), Feb. 20, 2010. Alabama Historical Commission has made a commitment to rehabilitate the

- Mobile Middle Bay Light, built in 1883, following a \$90,000 structural assessment by architects, engineers, scuba divers, and carpenters.
- Lucy D. Rosenfield and Marina Harrison. Architecture Walks: The Best Outings Near New York City. Rivergate Books (2010). 288 pp., illus. \$19.95. Suggestions for tours within about a two hours' drive of NYC, includes some IA sites, e.g., Starrucca Viaduct.
- Dinah Spritzer. Living Against the Grain in the Czech Republic. NY Times (Mar. 18, 2010). A family lives in a modern concrete box built on top of a 1943 grain silo.
- Alison Trost. The Inside Story. MSC (April 2010), pp. 60-61. Trost recapitulates the construction history of Spaceship Earth, the world's first complete geodesic sphere when completed in 1982, and the centerpiece of EPCOT Center at Walt Disney World in Florida. An earlier article by designers John P. Grossman and Glenn R. Bell. EPCOT Center's Gateway to Tomorrow. MSC (4th Quarter 1982), pp. 5-9, is now available online at www.modernsteel.com/SpaceshipEarth.

BRIDGES

- Wesley P. Hester. Boulevard Bridge Marks Its 85th Birthday. Richmond Times-Dispatch (Jan. 2, 2010). History of steel-truss toll bridge over the James River.
- → John Kelly. In Civil War-Era Bridge's History, A Breach That Couldn't Be Spanned. Washington Post (Apr. 21, 2010), p. B2. Research by David Simmons [SIA] and Dario Gasparini substantiates that Alfred Landon Rives, not Montgomery C. Meigs, was the engineer of the Cabin John Bridge (tour site–2001 SIA Annual Conference, Washington, D.C.). Meigs oversaw the construction of the Washington Aqueduct, of which the bridge was a part, but Rives designed the arch using an analysis he learned in France and which was unknown to Meigs. Rives was denied credit because he joined the Confederacy.

CONTRIBUTORS TO THIS ISSUE

Richard K. Anderson, Jr., Sumter, S.C.; Brian Bowen, Atlanta, Ga.; Bill Chamberlin, Tucson, Az.; Arlene Collins, Houghton, Mich.; Reese Davis, West Chester, Pa.; Eric DeLony, Las Cruces, N.M.; James Dilts, Baltimore, MD; Don Durfee, Houghton, Mich.; Steven Engelhart, Keeseville, N.Y.; Betsy Fahlman, Tempe, Az.; Dennis Furbush, Jackson Heights, N.Y.; Nicholas Graver, Rochester, N.Y.; David Guise, Georgetown, Maine; Mary Habstritt, New York, N.Y.; Chris Haga, Frederick, Md.; Duncan Hay, Boston, Mass.; Stephen G. Heaver, Baltimore, Md.; Neill Herring, Jesup, Ga.; Bob Kapsch, North Potomac, Md.; Carol Lockman, Wilmington, Del.; Jim Mackin, New York, N.Y.; Tim Mancl, New Castle, Del.; Christopher Marston, Silver Spring, Md.; Pat Martin, Houghton, Mich.; Jay McCauley, San Jose, Calif.; Anthony Meadow, Oakland, Calif.; John McGrain, Baltimore, Md.; Robert W. Passfield, Ottawa, Ont.; David Poirier, Hartford, Conn.; Roxanne Robertson, New York, N.Y.; Rick Rowlands, Youngstown, Ohio; Joe Seely, Chicago, III.; Justin Spivey, Oakland, Calif.; Darwin Stapleton, Sleepy Hollow, N.Y.; Lloyd Tepper, Villanova, Pa.; Tyler Turpin, Richmond, Va.; Robert M. Vogel, Washington, D.C.; Suzanne Wray, New York, N.Y.

With Thanks.

 N.J. Looks at Boost for Bayonne Bridge, Once Again. Star Ledger (Newark), Feb. 9, 2010. Engineers consider ways to increase the vertical clearance over the Kill Van Kull from 151 ft. to 215 ft. The bridge has become a bottleneck to larger cargo ships.

TEXTILES

- Michael Atkins. Port Wentworth Makes Plans for Eli Whitney. Macon (Ga.) Telegraph (Mar. 1, 2010). The city, northwest of Savannah, is planning a museum honoring Eli Whitney, inventor of the cotton gin. The \$4 million museum is in the initial planning stages and will be part of a cultural arts and recreation campus.
- Ralph Blumenthal. For Eddie Feibusch, A Life in Zippers. NY Times (Apr. 18, 2010), p. A19. Feibusch's ZipperStop, founded in 1941, may be the last remaining zipper store in New York City. This article profiles his business and gives a brief history of the zipper's invention and manufacture.
- ◆ Chris Horn. Group Trying to Save 121-year-old Atlantic Cotton Mills Building. Macon (Ga.) Telegraph (Mar. 6, 2010). Developers plan to convert the massive mill complex into residences, but local political infighting is jeopardizing the effort. Local residents see saving the mills as the key to saving their neighborhood. And, Phillip Ramati, Cotton Mill Renovation Takes Step Ahead (Apr. 7, 2010). City council resolves to support the renovation project and apply for a \$1.5 million grant to assist the developer.
- Emily Matchar. Return to a Mill, N.C.'s Glencoe Village, Now and Then. Preservation Magazine (Mar.-Apr. 2010). Revitalization of an abandoned mill village. Workers' housing has been rehabilitated for sale as upscale real estate. The former general store is now a museum of textile heritage.
- ◆ Lex Heerma van Voss, Els Hiemstra-Kuperus, and Elise van Nederveen Meerkerk, eds. The Ashgate Companion to the History of Textile Workers. Ashgate, 2010. 860 pp., illus. A systematic global and comparative history of textile workers over the course of 350 years. Covers the major changes in wool and cotton production, and the global history from pre-industrial times through the 20th century.

MINES & MINING

- Catherine Mills. Regulating Health and Safety in the British Mining Industries, 1800-1914. Ashgate, 2010. 310 pp., illus. \$114.95.
- Peter Wirth. Small Is Successful? How Small Mining Towns Tackle the Problems Left by Mining. TICCIH Bulletin, No. 47 (Spring 2010), p. 3. Investigation of 17 small mining towns in six Central European countries and various approaches to economic revitalization after the collapse of mining economies.

WATER TRANSPORT

- Burkhard Bilger. Towheads. The New Yorker (Apr. 19, 2010), pp. 84-97. Bilger's profile of self-taught tugboat designer and captain Latham Smith is interspersed with snippets of American tugboating history, including the "Irish navy" of New York Harbor, the growth of Louisiana towing alongside the Gulf oil industry, and the presence of Beat poets Allen Ginsberg and Peter Orlovsky at the launch of Smith's first tug in 1969.
- ◆ The End's in Sight and Money's on the Way. Willamette Falls Heritage Foundation Newsletter, Vol. 8, No. 3 (Fall 2009/Winter 2010). Refurbishment of the gates of the Willamette Falls Lock, built in 1873 on the Columbia-Snake River Inland Waterway.

- ◆ Jeff Hampton. Shipwreck May Be Oldest Off North Carolina Coast. The [Norfolk] Virginian Pilot (Mar. 29, 2010). Curators from the N.C. Underwater Archaeology Branch scramble to document a shipwreck, believed to be about 400 years old, based on a single coin dated 1601 and other coins embossed with the likeness of King Louis XIII. The wreck was fully exposed in December but has drifted more than two miles with loss of its keel and floorboards.
- ◆ The Jerseyman (www.ussnewjersey.org/thejerseyman) is the quarterly newsletter of the USS New Jersey Battleship Association. No. 3 (2007) discusses preparations for placing a large ship in dry dock. No. 4 (2007) is a first-person account of the Brooklyn Navy Yard from 1938 to 1943, including construction of the USS Iowa.
- ◆ Robert J. Kapsch [SIA]. Historic Canals and Waterways of South Carolina. Univ. of S.C. Pr., 2010. 296 pp., illus. \$44.95. South Carolina's first transportation revolution was the development of a network of canals and waterways. From the 1790s to the 1830s, the state was a preeminent leader in infrastructure improvements and developed an extensive system of more than 2,000 miles of canals and waterways connecting virtually every part of the state with the coast and the port of Charleston. The canal boom was driven by the need to transport cotton, the state's all-important cash crop. Kapsch offers a definitive and comprehensive recount of the history of innovation, determination, and improvement.
- Mireya Navarro. Gowanus Canal in Brooklyn Is Given Superfund Status. New York Times (Mar. 2, 2010), online ed. The U.S. Environmental Protection Agency officially designated the Brooklyn, N.Y. canal a Superfund site, setting the stage for a 10-year, \$300 to \$500-million cleanup. Gives a brief history of the canal and notes that an ongoing investigation will identify parties responsible for the contamination.
- Robert Pickenpaugh. Three Cheers for the "Ohio": McKinley's Battleship. Timeline, Vol. 27, No. 1 (Jan.-Mar. 2010), pp. 22-31. Detailed account of the excitement that surrounded the launching of the Ohio by President McKinley in 1901 at the Union Iron Works in San Francisco.

• Eric Wills. SS United States Conservancy Fears Ship's Demolition. Preservation Magazine Online (Mar. 16, 2010). Efforts to preserve the elegant and speedy ocean liner may be running out of time. In 2003, Norwegian Cruise Lines bought the ship, which is languishing at dock in Philadelphia. Norwegian's plan was to refurbish her for service, but that plan never materialized and now the cruise line is offering her for sale, probably as scrap.

RAILROADS

- Thomas Greco and Karl Spence. Dining on the B&O: Recipes and Sidelights from a Bygone Age. Johns Hopkins Univ. Pr., 2010.
- Jaques Kelly. Giving Snow-Covered Streetcar Tracks the Brushoff. Baltimore Sun (Dec. 26, 2009). Describes operation of the Baltimore Streetcar Museum's 1923 Philadelphia Rapid Transit snow sweeper.

ABBREVIATIONS:

MSC = Modern Steel Construction, published by American Institute of Steel Construction

TICCIH = The International Committee for the Conservation of the Industrial Heritage, www.mnactec.com/ticcih

Timeline = Quarterly journal of the Ohio Historical Society, 1982 Velma Ave., Columbus, OH 43211. \$40/yr., \$14.50/issue.

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**.

MEMBER NEWS

Elliot B. Hunt, Jr., of Newton, N.J. died Apr. 23. He was 81 years old. Elliot was a frequent participant in SIA conferences and tours, and an active member of the Roebling Chapter. He will be remembered for his cheery disposition and enthusiasm. Elliot received a B.S. in chemistry from New York University in 1950. He had a distinguished career as a paint chemist and worked for the Bureau of Standards in Washington, D.C.; Celanese Corp. in Summit, N.J.; and U.S. Testing in Hoboken, N.J. Donations in Elliot's memory may be made to the Canal Society of New Jersey, Box 737, Morristown, NJ 07963, or the Roebling Chapter, SIA, c/o Aron Eisenpress, Secretary, 235 West End Ave., Apt 14C, New York, NY 10023.

Bob Passfield, who retired from Parks Canada in August 2004, has been granted the status of Senior Historian Emeritus, Parks Canada Agency, for his past service and continued mentoring of new employees working in the IA

field. Since his retirement Bob has published several articles on historic engineering structures, as well as an article in *IA* on "Evaluating Authenticity". See *www.passrob.com*. He is currently a consultant with the Department of Public Works and Government Services Canada, working with the Heritage Conservation Directorate and a contractor on a recording and heritage evaluation of 15 engineering asset properties.

Peter Stott's book, Looking for Work: Industrial Archeology in Columbia County, New York, has been recognized by the Preservation League of New York State with an Excellence in Historic Preservation Award. The award ceremony was held at the New York Yacht Club in New York City on May 12. Among preservation projects also receiving awards was Walkway Over the Hudson for its rehabilitation of the Hudson River Bridge at Poughkeepsie (tour site—2009 SIA Fall Tour). ■

A Dimpled Chord Truss Bridge

n 1863 one of the leading German engineers of the time, J. W. Schwedler, proposed a Pratt-like, bowstring-truss configuration with a top chord that had a dimple-like dip at mid-span. While unusual, there was rationale for the dimple. Under a uniform load, all the diagonals in a Pratttruss bridge will be subject to tensile stresses, and the verticals to compression stresses. When the truss is subjected to a moving load the diagonals near the center of the span will undergo stress reversals, and thus need to resist compressive forces. It is more common however to provide a counter, or crossing diagonal in the panels, rather than making the single diagonal capable of resisting both tensile and compression stresses. By introducing a dimple, no diagonal will be put in compression due to a moving load; however, the vertical at mid-span will undergo a stress reversal, changing it from tensile to compressive stress. No documentation has ever come to light indicating that a truss of this design was ever actually built by Schwedler or anyone else.

In 1871 American Joseph Tracy obtained a patent for a truss configuration with a top chord that also had a dimple

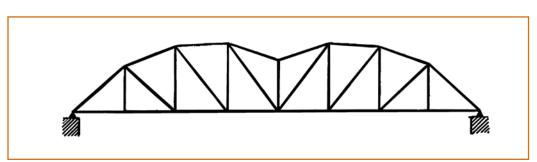
at mid-span. Strictly speaking he did not propose his design as a stand-alone truss, but as a "devise for giving additional stiffness to the top chord." His patent specification does not refer to the mid-span dip and thus makes one suspicious whether the dip was an incidental result of the pattern he developed to brace the top chord. As in the case of Schwedler's proposal, no documentation has been found to indicate Tracy's design was ever built.

A comparison of the stress pattern of a dimpled bowstring truss with that of a truss with a smooth continuous arc provides some clues as to why Schwedler considered a dimple truss design. Stress analysis using a modern computer program indicates that the insertion of the dimple at the midspan point of the top chord increases the level of tensile stress in the web diagonals and introduces a compressive stress in the center vertical when the truss is subjected to a moving or eccentric load. The dimple solution also increases the compressive stress in members of the top chord in the center panels. From a pragmatic point of view, the increase in the stress level on several members of the truss would

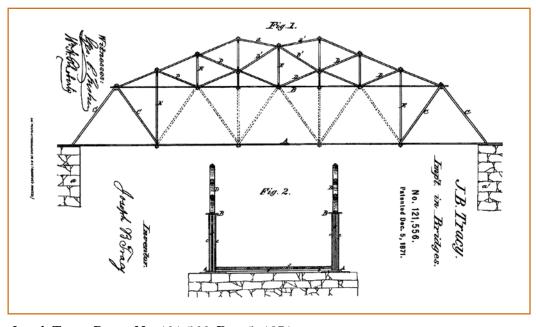
outweigh the advantage of maintaining a single tensile diagonal in each truss panel without the need of providing a counter, or crossing diagonal, to cope with stress reversal forces.

Schwedler's proposed insertion of a mid-span dip in a bowstring is an intriguing concept. While it eliminates the necessity of having counters, the ensuing ramifications make it an impractical solution because the resulting truss will be slightly heavier and thus cost more than the traditional solution with crossed tensile diagonals. Additionally, its appearance is at best strange because most would normally expect a truss to be highest at midspan, not dip down.

One can not help feeling disappointed that Schwedler's design was not built. It would have provided a twist on Gelett Burgess' doggerel rhyme about the purple cow, "I would rather see than be one." I would rather there be one.



Schwedler's 1863 Truss Proposal. From Merhtens, A Hundred Years of German Engineering, 1900.



Joseph Tracy, Patent No. 121,566, Dec. 5, 1871.

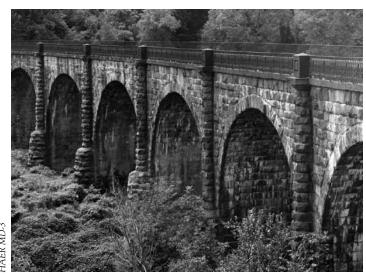
David Guise

SITES & STRUCTURES

Saved

The Katy Bridge, an early 20th-century vertical lift over the Missouri River at Boonville, Mo., has been the source of a longstanding battle among preservationists, the state government, the federal government, and the Union Pacific RR, which owns the bridge. The railroad had sought to tear it down, salvaging portions for reuse, and at one point even received permission to proceed from the U.S. Coast Guard. State officials and local preservation and recreational groups desired to save the bridge for use as a vital link in a 220-mile, rails-to-trails project and threatened legal action to stop its removal. In March, the State of Missouri, in a deal brokered by Governor Jay Nixon, announced that it had reached an agreement with UP to turn ownership of the bridge over to the City of Boonville. A mix of federal, state, railroad, and city funds will be used to maintain the Katy Bridge, and compensate the UP for a new bridge it wishes to build over the Osage River.—Boonville Daily News (Feb. 5, 2010)

Supporters of preserving the Thomas Viaduct (tour site-2001 SIA Annual Conference, Washington, D.C.) are kicking off an ambitious \$1.7 million restoration and fundraising campaign on July 5 to celebrate the viaduct's 175th anniversary. The viaduct is badly in need of repairs. In an unprecedented gesture, owner CSX RR has announced it will cooperate in a restoration plan that respects the viaduct's historic design. Privately raised funds will be used to restore the original cast-iron railing (only a few sections remain on the bridge), repair a marble monument at one end, and develop educational materials for the general public. Benjamin H. Latrobe, II designed the viaduct, which opened in 1835 on the B&O's new branch line between Baltimore and Washington, D.C. The eight-span granite arch bridge has an overall length of 612 ft. It is built on a four-degree curve, which required each of the arch spans



Thomas Viaduct, 175 years old.

to be built at a varying skew, quite an ingenious and technically challenging solution by the young Latrobe. Info: James D. Dilts, 4611 Keswick Rd., Baltimore, MD 21210; (410) 235-9733.

Mt. Vernon Mill No. 1 (tour site–1995 SIA Annual Conference, Baltimore) has been targeted for redevelopment into about 80 apartments, office space, and a restaurant. The four-story cotton mill is located in the Jones Falls Valley.—Baltimore Sun (Oct. 15, 2009)

Threatened

The future of Augusta, Georgia's Sibley Mill was in question after negotiations between a developer and the current owner, Avondale Mills, broke off last year. The five-story mill is an architectural wonder built in 1882 from the bricks of the ruined Confederate Powderworks. Cotton textile production ceased in 2006. The building is located within the Augusta Canal National Historic Landmark. Currently vacant, it is considered vulnerable to vandalism. Prospects for the mill became considerably brighter in February when the Augusta Canal Authority entered into an agreement with Avondale to buy the property. The authority will also own the mill's hydropower turbines, which are capable of generating over \$1,000 per day from the sale of electricity. The acquisition will allow the authority to market the Sibley Mill to developers with the goal of long-term preservation.—Augusta Chronicle (Jan. 11 & Feb. 23, 2010)

USS Olympia, commissioned in 1895 and the oldest still-floating steel warship, is docked at the Independence Seaport Museum in Philadelphia. The museum announced in February that it can no longer afford the ship's upkeep. Museum management is seeking an organization to take over ownership and invest more than \$10 million in badly needed repairs, including restoration of the steel hull, which is leaking badly. An additional \$20 million would be needed to update interpretation and establish an endowment for her future care. The museum's prior efforts to raise funds through grants and donations have not been successful. The Olympia, Admiral Dewey's flagship, led five other U.S. warships into Manila Bay in April 1898 during the Spanish-American War, capturing the Philippines from the Spanish. She was docked at the Philadelphia Navy Yard from 1922 to 1959, then placed on display at Penn's Landing on the Delaware in downtown. The Seaport Museum took ownership from the Olympia Cruiser Association in 1996.— Philly.com (Feb. 26, 2010)

Lost

Boeing Company's Plant 2 has been scheduled for demolition, according to a spokesperson for the airplane manufacturer. The massive 35-acre plant with a camouflaged roof

(continued on page 13)

NOTES & QUERIES

SIAN and IA Back Issues Available. Darwin Stapleton [SIA] is offering to give away back issues to an interested member. The run goes back to the 1980s. Contact: Darwin. stapleton@yahoo.com.

Corrugated Metal Co. Bill Chamberlin [SIA] is researching the history of this New Berlin, Conn., company, predecessor to the Berlin Iron Bridge Co. He would appreciate the opportunity to learn about and view any relevant materials. Contact: 563 County Route 10, Corinth, NY; bchamberlin 2@juno.com.

SteelDay, sponsored by the American Institute of Steel Construction, is Sept. 24, 2010. More than 170 steel fabricators, mills, service centers, galvanizers, bender-rollers, and others across the country will be offering tours, presentations, and seminars. The event's purpose is to invite architects, engineers, and the general public to see how steel contributes to building America. To find out more or sign up for an event: www.steelday.org.

David Sarnoff Library Collection, Hagley Museum & Library, Wilmington, Del. The David Sarnoff Library

Collection is the largest single collection of material on the life of David Sarnoff (1891-1971) and the companies that he founded or led, most importantly the Radio Corp. of America (RCA) and the National Broadcasting Co. (NBC). The collection, totaling 2,000 linear feet, includes David Sarnoff's personal library, a large vertical file of pamphlets and other publications, runs of scientific and trade journals, extensive photographic, film, and video coverage of Sarnoff's life and works, and material on RCA's and NBC's iconic headquarters and broadcast studios in New York's Rockefeller Center. In addition, the collection includes a large volume of laboratory notebooks and other purely technical materials, including the papers of television pioneer Vladimir Zworykin and other RCA research scientists. In 1993, Hagley received a smaller RCA collection from the RCA Camden Plant. Taken together, Hagley now holds a significant portion of the publicly available RCA archive. The David Sarnoff Library Collection helps us understand the intellectual and technological contributions of David Sarnoff, the development of the electronics industry, the beginnings of American broadcast media, and the roots of America's

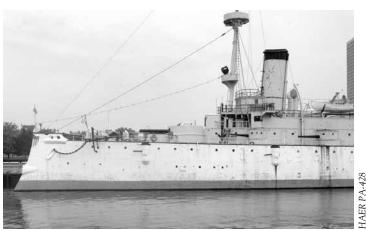
SITES & STRUCTURES (continued from page 12)

was built in 1936 as Boeing geared up for production prior to World War II. Over the next 35 years, it produced a variety of planes including the B-52, 307 Stratoliner, EB-47, 377 Stratocruiser, and the first 737. About 40 years ago, Boeing moved its operations to Everett, Wash., leaving behind Plant 2.—Preservation Magazine (Feb. 5, 2010)

Schenuit Tire Works Burned. On February 21, the Schenuit Tire Co.'s mostly vacant plant in the Woodberry section of Baltimore City burned in a five-alarm fire. Starting in 1925, the company founded by Frank G. Schenuit made tires for autos and later for aircraft in a historic cotton mill of 1843. The old works was still inside a sprawling complex of mid-20th-century brick additions. The site had been the home of the Woodberry (flour) Mill that burned just about the time the cotton works opened and both mills had briefly co-existed. The mill bordered the tracks of the Northern Central RR, in recent years succeeded by Maryland Transit Administration's light rail line. The burned-out ruins still stand, but the old gable peak of the cotton works that peeped above the brick tire plant walls disappeared in the conflagration.—John McGrain [SIA]

Marshall Foundry/Industrial Tool & Die buildings in Troy, N.Y., were demolished by city officials after being found structurally unsound in early February. Marshall dated to the 1830s and was later occupied and expanded

by IT&D in the 1950s. IT&D moved to a suburban location about 10 years ago. The complex was among the last remnants of the industrial area called Ida Hill or Mount Ida. Other plants now gone included the Mount Ida Cotton Mill, the Manning & Peckham Paper Mill, the Tomkins Machine Shop, and the Griswold Wire Works.—[Albany] Times Union (Feb. 4, 2010)



Philadelphia's Independence Seaport Museum can no longer afford upkeep on the USS Olympia.

CHAPTER NEWS

Northern New England's spring tour was held in Franklin and Laconia, N.H. (May 22). The itinerary included the 11-ton, 14-ft.-diameter flywheel from the large Corliss engine formerly of the Stevens textile mill; remains of several lumber mills; Franklin Falls hydroelectric station; the Franklin Historical Society; a presentation on the Laconia Car Co.; and the Belknap Mill.

Oliver Evans (Greater Philadelphia) joined with the Society of Architectural Historians, Philadelphia Chapter, to sponsor a lecture on the history of neon signs in Philadelphia by Len Davidson, curator of the Neon Museum of Philadelphia (Mar. 24). Davidson has collected or preserved more than 200 vintage signs. In May, the chapter gathered at the Fairmount Water Works for a presentation from Terry Snyder, deputy director of the Hagley Library, to hear about the new interactive web site that employs a series of visualizations, maps, and timelines to present the early history of the E. I. du Pont de Nemours & Co. gunpowder works in Wilmington, Del. (tour site–2004 SIA Fall Tour). Also in



Tables used to make 50-ft. hose at the Home Rubber Co. in Trenton, N.J. The Roebling Chapter toured the 128-year-old company, which is housed in buildings originally built by the John A. Roebling's Sons Co.

May, the chapter held a tour of the Reading RR Viaduct, an elevated four-track, grade-separation built in the early 1890s in Philadelphia's Callowhill neighborhood. A local group is building support for rehabilitating the viaduct as an urban park, similar to New York's High Line (www.readingviaduct.org).

Roebling (Greater N.Y.-N.J.) had an ambitious spring schedule of events. The season kicked off with a tour of Lite Brite Neon, a neon sign fabricator (Apr. 8). Lite Brite Neon is located in the old American Can factory in south Brooklyn. The Hall of Fame of Great Americans in the Bronx welcomed the chapter (Apr. 11). The hall commemorates many pursuits, from sports to politics, but the focus of the tour was famous scientists and inventors. A week later the chapter was at the Industrial Maritime Museum at Fort Schuyler (Apr. 17) to learn about the history of the merchant fleet and port operations. This was followed two weeks later by a process tour of the Home Rubber Co., a producer of custom tube, sleeves, hose, gaskets, and sheets (Apr. 30). The last of the spring tours was Aero Nav Co., a firm that specializes in simulation testing for the aeronautics industry (May 15).

Southern New England toured the Stevens Linen Works in Dudley, Mass. (Apr. 24). Established in 1847 and in continuous operation to the end of the 20th century, Stevens made linen products from raw material to woven cloth. The principal surviving buildings were constructed during the Civil War. Sara Wermiel [SIA] has prepared the National Register nomination for the mill complex and led the tour.

Support Your Local Chapter. For info on a chapter near you or to start one, contact Tim Mancl, SIA Director, Local Chapter Chair (tjmancl@gmail.com) or check out the local chapters section of the SIA website (www.sia-web.org).

NOTES & QUERIES (continued from page 13)

impact on modern global communication.—Hagley Library & Archives (Apr. 16, 2010)

Lunar IA. California's State Historical Resources Board recently listed on the California Register of Historical Resources the Apollo 11 objects left behind on the moon's surface in 1969 by Neil Armstrong and Buzz Aldrin. The California Register allows for manuscripts and objects, as well as places, to be listed when they are significant in California's history. [Could this also be California's claim to jurisdiction on the moon?]

Mystery Photo. A number of readers identified the large wheeled device shown in SIAN (Winter 2010) as a Michigan logging wheel introduced in 1875 by Silas C. Overpack for hauling logs out of the woods. The device enabled year-round operations rather than the former practice of skidding logs along the snowy or frozen ground only during winter. The wheels came in diameters, from 9 to 10 ft., priced at \$100 per diameter foot, quite costly. They are still displayed in a number of major museums. The full account: http://en.wikipedia.org/wiki/Michigan_logging_wheels. Thanks to all.—Nicholas M. Graver, ngraver@rochester.rr.com

IA EXHIBITS

February 2010 marked the seventh anniversary of the roundhouse roof collapse at the **B&O Railroad Museum** (*SIAN*, Spring 2003). One of America's most beloved steam engines, the **Thatcher Perkins**, was one of 22 locomotives that were severely damaged in the historic Baltimore snowfall. The B&O Railroad Museum is proud to announce the completion of the restoration of this historic locomotive and its return to the roundhouse. Thatcher Perkins, B&O's Master of Machinery, designed this locomotive in 1863. It is one of eleven "Perkins Ten Wheelers" produced. During the Civil War it hauled Union troops and war materiel. For most of its working life, the engine was not known as the "Thatcher Perkins." The name was applied for the B&O's 1927 Centennial, *The Fair of the Iron Horse*, to honor its designer.

On a sad note, also from Baltimore, the **Public Works Museum** announced it was closing effective on February 4. Housed in a working 1912 sewage pumping station, the museum opened in 1982 and attracted about 8,000 visitors annually. The museum was housed in a small portion of the station and offered the uncommon opportunity for visitors to learn about what happens when water goes down the drain, as well as to actually experience the operating facility. Over the years, the museum had also featured exhibits on asphalt, plumbing, and rail and highway tunnels. Midyear city budget cuts forced the closure.—Baltimore Sun (Feb. 4, 2010)

Where New York Began: Archeology at the South Ferry Terminal was on exhibit at the New York Transit Museum Gallery Annex, Grand Central Terminal through July 5. In early 2009, a new South Ferry subway station opened on the southernmost tip of Manhattan In order to build the station, the Metropolitan Transportation Authority (MTA) was required to conduct an archeological review and excavation. This provided an extraordinary glimpse into the very place that the modern city has its



roots. Excavations yielded over 65,000 artifacts, including ceramic sherds, shells, coins, tobacco pipes, architectural materials, and a cast-iron yoke from the roadbed of a street railway. Among the most important finds of the excavation were pieces of two 18th-century landmarks— the Battery Wall and Whitehall Slip. Stones from the wall were on view, as are photographs of a section of the wall that was reinstalled in the new South Ferry station. Whitehall Slip was built in stages from the 1730s to 1790s using landfilling and dredging. It allowed boats to dock and spurred the commercial and military use of lower Manhattan. Excavation of the slip uncovered stone, construction material, 19th-century English ceramics, household goods, refuse, and animal bones, furthering our knowledge of the city's commerce and its residents' lifestyles. Info: www.mta.info/museum.

SIA Welcomes New Local Chapter

The SIA Board of Directors voted in April to accept the petition of the SIA's newest local chapter, the Edward P. Allis Chapter of Southeastern Wisconsin. The petition was submitted by John H. Kopmeier, Jr., President-elect of the chapter. The chapter held its charter meeting on February 8. Attending were Bob Hoffman, Bill O'Brien, Bruss Weiss, John Kopmeier, James Kieselbrg, and Tom Fehring. The chapter is considering a number of interesting tours in the upcoming months. For information on joining the chapter, contact John Kopmeier, (414) 277-2300.

Edward P. Allis (1824-1889) was an entrepreneur and innovator in the production of steam engines, agricultural equipment, and heavy machinery. He moved from his native upstate New York to Milwaukee in 1846 to begin a career in the leather business. He built two extensive tanneries at Two Rivers, Wis. In 1860, he purchased Milwaukee's Reliance Works, a small manufacturer of steam engines and other mill equipment. The timing was opportune, coinciding with the expansion of the region's lumber and milling industries. Allis worked with millwright George Hinkley to develop a very successful high-speed saw for large sawmills. By the late 1880s, Allis was Milwaukee's largest employer, building heavy machinery for factories, mines, power plants, and public utilities. In 1901, the Allis merged with the Fraser & Chalmers to become the well-known Allis-Chalmers Mfg. Co.

Attesting to both their popularity and fragility, 1,470 fragments of clay tobacco pipes were found at the South Ferry Terminal site. Though pipes are utilitarian objects, their design, decoration, and makers' marks can be seen as icons for the brief period in which each was manufactured and used. Many of the pipes uncovered at South Ferry were English or Dutch made and showed signs of use.

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CALENDAR

2010

Aug. 10-15: Reusing the Industrial Past, ICOTEC and TICCIH Joint Conference, Tampere, Finland. Paper sessions, IA tours. Info: www.tampere.fi/industrialpast2010.

Sept. 9-12: Seventh Biennial Conference on Historic Roads, Washington, D.C. Info: www.historicroads.org.

SEPT. 16-19: SIA FALL TOUR, MONTPELIER & BARRE, VT. Registration materials will be sent to members in midsummer. Info: www.sia-web.org.

Sept. 19-24: World Canals Conference, Rochester, N.Y. See article in this issue. Info: www.wcrochester.org.

Sept. 30-Oct. 3: Society for the History of Technology (SHOT) Annual Conference, Tacoma, Wash. Info: www. historyoftechnology.org/annual_meeting.html.

Oct. 6-8: BigStuff 2010, Imperial War Museum, Duxford, U.K. Conference on the display of large technological objects within museum settings. Info: http://duxford.iwm.org.uk/server/show/ConWebDoc.6878

Oct. 6-9: Odyssey in the Ozarks, Society for Commercial Archeology Annual Conference, Fayetteville, Ark. Tours of commercial landscape and architecture along U.S. Routes 62 & 71. Info: www.sca-roadside.org.

Oct. 6-10: Assn. for Preservation Technology Annual Conference, Denver, Colo. Theme: Layers across Time, Preserving a Diverse Western Heritage. Info: www.apti.org.

Oct. 13-16: Pioneer America Society Annual Meeting, Castleton, Vt. Theme: Memory and Landscape on New England's Northern Frontier. Paper sessions and tours, some IA-related (railroads, bridges, marble works). Info: www.pioneeramerica.org.

Oct. 28-30: Popular Culture and the Built Environment, Mid-Atlantic Popular/American Culture Assn., Alexandria, Va. Theories, personalities, styles, and technologies that influence buildings, city planning, and community design. Info: www.mapaca.net.

Nov. 9-12: VI Latin-American Colloquium on Preservation and Protection of Industrial Heritage, Belo Horizonte, Minas Gerais, Brazil. Info: www.patrimonioindustrial.org.br.

Nov. 10: Crisis and Consequence Conference, Hagley Museum & Library, Wilmington, Del. The historical impact of financial crises on American society, business, and technology. Info: clockman@hagley.org.

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Mar. 31-Apr. 2: Business History Conference, St. Louis, Mo. Info: Carol Lockman, (302) 658-2400, ext. 243; *clockman@hagley.org.* ■