

**SIA FALL TOUR REVIEW MID-HUDSON VALLEY** 

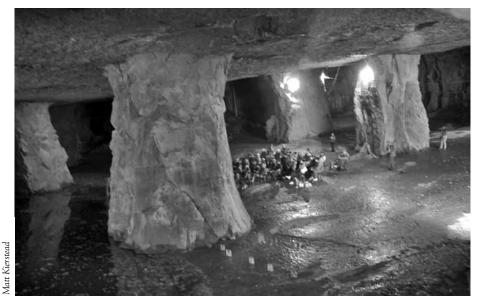
he Mid-Hudson Valley Fall Tour, Oct. 8-11, explored New York's Dutchess, Orange, and Ulster counties. Underlying the SIA's varied tour itinerary was the valley's rich historical and cultural background, which was being celebrated this year upon the 400th anniversary of Henry Hudson's exploration of the river that bears his name.

The 315-mile-long Hudson brings fresh water from the Adirondacks to the Atlantic, but the ocean sends saltwater tides 160 miles north, to Troy. In 1609, Henry Hudson, misled by the increasing depth of the river, sailed as far as present-day Albany before realizing he had not discovered a passage to China. Following Hudson's lead, Dutch settled the region in the 17th century and were followed by the British, who seized New Netherlands from the Dutch and named the colony New York.

By the time of the American Revolution, the Mid-Hudson had become an important production center for the cannons, cannonballs, chains, and other iron products needed for defense. When crowding spread disease in New York City during the mid-19th century, those with means retreated to the Hudson Valley. Trains increased the region's popularity and made commuting an option for prosperous New Yorkers. Some SIA members were able to arrive at the Fall Tour by taking these very same scenic Hudson River commuter lines.

A few miles from the Holiday Inn conference hotel, SIA members were welcomed with a buffet reception Thursday night at the Steel House Restaurant on Rondout Creek, a tributary of the Hudson. This Kingston restaurant is the site of the former boiler shop for the **Cornell Steamboat Co.** and later the **Millen Steel** fabrication shop. Hudson River sloops transported locally grown produce to New York City and returned here with manufactured goods. The 1828 Delaware & Hudson Canal terminated at Rondout, making the port a major transshipment point for Pennsylvania coal,

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SIA's Fall Tour participants gather for a presentation inside the Widow Jane limestone mine at the Snyder Estate, Ulster County, N.Y.

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as well as natural cement, bluestone, bricks, and natural ice. At its height in the mid-to-late-19th century, Cornell Steamboat employed hundreds of men to pilot and maintain over sixty tugboats. Cornell remained in operation until the 1950s building and repairing small naval vessels, including patrol boats.

During our late evening stroll Thursday through the Cornell repair shop, Tim Ivory, engineer of the historic fireboat *John J. Harvey*, provided an overview of Robert Iannucci's collection of four WWII patrol boats named *Fleet Obsolete*. During WWII, the U.S. Navy utilized small, fast, inexpensive, and highly maneuverable patrol torpedo (PT) boats. Three classes of PT boat were on display. Ivory explained that Vosper PTs had a "quick set up without structural integrity;" that Higgins PTs had "full decks, were a better ride and served in the European theater" and "were there at the worst" of the war; and that Elco PTs had primary hulls of plywood and deck lengths from 70 to 80 ft. Following the war, PT boats were routinely amputated of "excess" length to avoid the pilot's license required of watercraft 65 ft. or longer. *PT* 48, originally 77-ft. long,

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.

Mailing date for Vol. 38, 4 (Fall 2009), Dec. 2009. ISSN 0160-1067. If you have not received an issue, apply to SIA-HQ (address above) for a replacement copy.

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*. was chopped down to 59 ft. for use as a dinner cruise boat in Florida. The Higgins *PT* 459, originally 78-ft. long, is currently 65 ft., and has been reconfigured as a fishing boat. The Elco *PT* 615 was retrofitted as a yacht after WWII. It was used by Clark Gable in the 1950s and sold several times until it was discovered "rotting under an apple tree," purchased, and brought to Rondout.

Ivory next discussed the W.B. Mershon (Saginaw, Mich.) resaw. This hulk of a machine was poised for the scrap yard when Robert Iannucci made an eBay purchase. Mershon's planing and milling invention was sparked by Standard Oil's request for a wood product that was 20 ft., by 8 in., by one-quarter in. for use in barrels and crates. Equipped with blades from Olson Saw Blades (Bethel, Conn.), the resaw accepted a long plank of wood between two vertical feed rolls. In less than thirty seconds, it produced a 20-ft.-long wafer-thin slice of lumber.

Jessica DuLong, author of *Rediscovering America on the* Hudson River: My River Chronicles, treated us to a spellbinding reading. From the press release, we learn that DuLong "ditches her dot-com life for the diesel engines of historic fireboat John J. Harvey and along the way discovers four centuries of cultural history on the Hudson. The more she spends time with the boat's finely crafted machinery and learns about the river's industrial history, the more she wonders what America is losing in our shift away from hands-on work" (www.jessicadulong.com).

On Friday, both SIA bus groups visited Walkway over the Hudson, a former railroad bridge. After twenty years of planning and building, the 1.25-mile-long **Poughkeepsie-Highland Railroad Bridge** opened for business in 1888. The landmark cantilever-truss bridge, 212 ft. high, allowed 145 cars an hour to traverse the Hudson during WWII. With the advent of interstate highways, rail traffic subsided. A suspicious fire on the tracks in 1974 ended the bridge's rail use. Despite the fire, the bridge was structurally sound. The cost of demolishing the bridge was estimated as twice that

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Wood barrels stacked ceiling high at Tulithtown Spirits, a "micro" distillery.

# Mark Your Calendars! SIA 2010 Annual Conference, June 3-6 • Colorado Springs, Colo.

Watch the SIA Website (*www.sia-web.org*) or subscribe to SIA e-news (see article in this issue) for updates on tour sites and planned activities.

#### Call for Papers

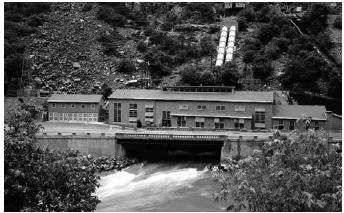
The SIA conference paper committee is soliciting 20-minute individual presentations, 90-minute themed blocks of presentations, and 90-minute panel sessions. If there is sufficient response, there may also be a poster display session. These may be works in progress, and presentations should offer interpretation and synthesis of the data. Presentations and panels on all aspects of industrial archeology, technology, and social change related to industry are welcome. The conference theme is Industry on the Frontier, so proposals related to the Rocky Mountain region and beyond are encouraged. The paper sessions will be at the Conference hotel, the Antlers Hilton.

Since only an abstract is required for submittal, these papers and panels are an excellent vehicle for students. Student travel grants may be applied for separately (see below).

The abstract and author information should be submitted electronically (.doc or .odt format) unless special arrangements are made. Support at the conference for presentations in other than .ppt or .odp formats may not be available.

We strongly encourage using these presentations as the foundation for larger articles for IA or SIAN.

Proposals or questions should be submitted to Jay McCauley, Acting Conference Paper Chair, *jay@knightsia.* org. The deadline for proposals is Mar. 15, 2010.



Shoshone Hydroelectric Complex, 1908-09. Glenwood Canyon, Colo.

**Student Travel Scholarships**. The SIA awards travel scholarships to help full-time students and professionals with less than three years of full-time experience to attend annual conferences. Those interested in applying for a travel scholarship to attend the annual conference in Colorado Springs should submit a concise letter outlining their demonstrated interest in and commitment to industrial archeology or a related field, and one letter of reference. Deadline for applications is Mar. 26, 2010. Apply to Patrick Harshbarger, SIA Scholarship Committee Chair, 305 Rodman Road, Wilmington, DE 19809; *phsianews@aol.com.* ■

#### FALL TOUR REVIEW (continued from page 2)

of renovating the structure, so local organizers promoted plans to reuse the bridge. When a study indicated that a \$38.8 million investment in restoring the bridge would provide a 200% return in regional economic benefits, support for the bridge's preservation increased. In 1992, Fred W. Schaeffer and others founded Walkway over the Hudson to advocate for preserving the bridge. The walkway opened in October of this year to great public acclaim (www.walkway.org).

From there, the buses followed separate itineraries. This author took the southern tour which began at the **Tilcon Clinton Point Quarry.** Tilcon blasts and crushes sedimentary, carbonate rock (limestone), igneous rock (granite), and other materials utilizing sieve analysis, grading, and specific gravity for quality control. As our tour bus traveled to the base of mining operations, 75 ft. below sea level, we witnessed a huge Mack truck approach a surge pile of pre-blasted stone. We walked by several structures dedicated to sorting stone, and, approaching the river, watched as an operator stood in a barge directing, via radio, the loading (continued on page 4)



Hansen grist mill.

#### FALL TOUR REVIEW (continued from page 3)

of stone. Sixty truckloads fill one barge.

The Heritage Center in Newburgh resides in an 1839 courthouse. Russell Lange and City Historian Mary McTamaney spoke about Newburgh's industrial past, including the Caldwill Steam Power Mills (founded in 1843, successively the site of a cotton-cloth manufacturer, a lawnmower company, and the Regal Bag Factory, which made handbags); the Kilmer brothers' nail and wire works (est. 1888); the Newburgh Steam Mills (a gracious six story building built in 1844 that housed up to 500 workers and 400 looms); DuPont Plastics (est. 1911); and Stewart International Airport, formerly Stewart Air Force Base.

American Felt & Filter Corp. in New Windsor was founded in 1898, and is run today by its President and CEO Wilson H. Pryne. AFFC creates engineered woolen nonwovens including filter media, felt, and stitch-board in 132 styles. It was mesmerizing to watch as the raw wool was processed into felt using machines with wooden "belts" that looked the age of the company—111 years. The carding system repeatedly combs the scaled fibers, transforming a cotton candy-like material into a refined felt surface. AFFC provides all the felts to Steinway Piano. AFFC is agile; when pen producers decided to buy their \$2 million (a year worth) of felt tips from Japan, AFFC responded by research to develop new product lines including high-end protective gear, fluid transfers for printer cartridges, and wicking materials and liners for furnaces (*www.affco.com*).

Established in 1971 in Beacon by MIT metallurgy graduate Dick Polich, **Polich Tallix** foundry casts fine bronze, stainless steel, and silver sculptures in editions of no more than fifty (and usually fewer than five). Polich Tallix uses innovative resin-bonded sand, urethane molds, ceramicshell fabrication, autoclave wax removal, and tilt furnaces to create hollow forms no thicker than three-quarter inch. Risk-taking combined with careful methodology has made this company a world leader in fine art casting. Polich Tallix artisans are skilled at responding to the varied temperaments and desires of each artist. Jasper Johns mails in his direct wax pieces without making a mold—and risks



A worker directs loading of a barge at the Tilcon Stone Quarry.

losing the work each time. Blue-chip artist Jeff Koons "has an eye like a micrometer" and insists that every square inch of his bronzes be perfect.

This author was not aboard the northern bus tour on Friday, but the process tours and site visits were reportedly quite interesting. A visit to **Zumtobel Lighting** in Highland revealed not just the ecologically minded manufacturing process used in their lighting systems but also the constructed wetland used to treat the factory's waste water. **Cobra Systems** is a manufacturer of barbed wire and other "perimeter security" products for industrial facilities, prisons, and military operations.

Returning to Kingston, a guided tour of the **Hudson River Maritime Museum** revealed an impressive collection of paintings, prints, photographs, ephemera, vessel blueprints, artifacts such as ice-harvesting tools, and a variety of ship models. Its collection of small craft includes a 100-yearold shad boat, a lifeboat from the steamboat *Mary Powell*, a lighthouse tender, and several ice yachts. The *Mathilda*, an

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American Felt & Filter.



Polich Tallix foundry.



Fall Tour participants board the restored PT 728.

1898 steam tug, is permanently dry docked on site.

These SIA members then boarded the 1950 Lehigh Valley Railroad Tug Cornell, which transported railroad cars via barge across New York harbor from 1950 to 1971. She was the first of four tugs initially built for the Lehigh Valley RR, all boasting the use of diesel-electric propulsion. After visiting the Rondout II lighthouse, SIA members viewed the Feeney shipyard and Fitch bluestone quarry office building from the tug. A quick visit to the New York Trolley Museum finished up the day's tour.

Much of Saturday's touring focused on the manufacture of natural cement in the Rosendale area. Rosendale natural cement was produced by burning high clay content (argillaceous) limestone, without including additives and without monitoring exact percentages of the naturally found ingredients. The resulting burnt stone was crushed to a powder and later mixed with water to set. Rosendale cement was eventually supplanted by Portland artificial cement, composed of predetermined proportions of pulverized shale or calcium, limestone, gypsum, silica, iron oxide, alumina, and other additives. During the 19th century, kilns calcined lime to create cement, and steamed staves to make barrels. The natural cement produced here supplied 80 percent of the U.S. market, including the base of the Statue of Liberty and the Brooklyn Bridge.

Both buses visited the same sites in different order. First stop for this author's group was Williams Lake and its adjacent cement works, which was transformed into a resort in 1929. From its founding as a resort, the attractive lakeside area became a family vacation spot, but aged along with its clientele and closed in 2007. Tim Allred and a group of resident investors, charmed by the history, rail tracks, decaying kiln walls, and varied landscape, have now purchased the site with hopes of creating an environmentally and socially responsible resort for the 21st century.

The Snyder Estate in Ulster County is home to the Widow Jane (Snyder) limestone mine and the Century House Museum. The president of Century House, Dietrich Werner, guided the SIA members to the limestone mine's interior, a vast sloping space flooded with water and hulking "columns" of stone left in place to support the roof. Construction is similar to the "room-and-pillar" technique familiarly used in underground coal mines. The mine was



Ruins of cement kilns at Rosendale, N.Y.

active from 1836 to 1970. All mined rock was crushed, sized, and separated by manual labor. The 50-ft. limestone layer was not fixed at a regular depth but plunged at a steep diagonal into the surface. Another mine on the adjacent Lawrenceville property was excavated at the same time and both mines "met" underground. The relationship between the two owners was not cordial, and extensive court records document their legal struggles and provide a record of daily activities.

We gathered for a picnic lunch at Whiteport, home of the "true Rosendale cement." Michael Edison explained that natural cement has a higher strength than artificial Portland cement, which is more brittle. Natural cement, which is never white in color, is found in many pre-1900 historic structures. Despite its appropriateness for historic restoration work, natural cement is currently in low demand; the price is almost \$200 for a 5-gal., 45-lb bucket. For those wishing to work with green, sustainable materials, it should be noted that production of natural cement requires less than half the energy of other cements and is less toxic to workers.

A copy of Dennis E. Howe's The Industrial Archeology of a Rosendale Cement Works at Whiteport, published by Whiteport Press (2009), was provided to all tour partici-(continued on page 16)

### **Events Coordinator SIA Job Opportunity**

The SIA has an opening for the part-time position of Events Coordinator. The Events Coordinator plays a key role in the planning and execution of the SIA's springtime Annual Meetings, Fall Tours, and Study Tours. The job includes selecting future event venues, recruiting and organizing local volunteers and co-sponsoring organizations, managing the project schedule and budget, and coordinating the event itself. Current SIA membership is required, as well as experience participating in SIA events. Relevant event planning experience is also important. For more information or to submit your application contact SIA President Mary Habstritt, president@siahq.org, no later than Jan. 15, 2010.

Aatt Kierstea

# What Is A Proper Ending?

Il truss configurations must have ends, raising the question of whether it is more appropriate to terminate them with a sloping or a vertical member. Is there a "correct" answer? A perusal of both former and existing truss bridge configurations produces examples of each type. If one configuration is indeed "better," as more efficient from an engineering point of view, then why weren't all trusses built using that configuration? What set of criteria should be used to determine what makes one solution "better" than the other? Should it be engineering efficiency (the use of the minimum amount of material)? The lowest total cost of material and labor? Aesthetic appearance?

Howe trusses. A parallel-chord Howe through-truss consists of a series of rectangular panels that contain vertical tensile members and diagonal compressive members. As is the case for all trusses, the Howe configuration is symmetrical about the center of the span, each half being a mirror image of the other. The diagonals slope downward from the top chord toward the abutments. Most early Howe trusses had counter braces in each panel to handle stress reversals due to moving loads. This resulted in an X configuration in each panel, the principal diagonal usually being a pair of timber members and the counter diagonal a single member.

Most early Howe trusses were used to construct covered bridges. Their chords and diagonals were timber, their verticals wrought-iron rods. When iron became less expensive, iron bars were used for their bottom chords. Since the bridge's roof needed to extend to the ends of the structure to protect the framing from the elements, extending the top chord to the abutment was not only logical, but necessary to support the roof rafters. In fact, many covered bridges were built with roofs that cantilevered past the truss in order to provide better protection. However, if the bridge is not covered, the segment of the top chord in the end panels, as well as the end verticals, serves no structural value. Thus, from a strictly engineering point of view, the uncovered Howe truss should have sloped ends. Yet, despite competitive bidding, which is almost always based on cost, uncovered Howe trusses were built with vertical ends.

Unfortunately, engineers tend not to commit their



A symbol of civic pride. Non-structural vertical portal. Manchester Bridge over the Allegheny River in Pittsburgh, Pa.

thoughts to the written page; thus no documentation has been found articulating why they designed bridge trusses with vertical ends despite the fact that they used material that did not contribute to their strength. We can only speculate.

Since the early use of the Howe truss (patented in 1840) was for covered bridges, which required square ends to provide support for the roof over the entire length of the bridge, there is a strong possibility that the vertical end was continued simply out of habit when the roof was no longer a part of the bridge design. Railroads discontinued the use of roofed bridges at an early date, as sparks from wood- and coal-burning locomotives were a serious danger. But intriguingly, unroofed railroad bridges built at a later date in the Midwest and West often incorporated vertical ends.

Shifted, protruding loads on trucks or railroad cars can collide with the sides of narrow bridge entries, resulting in serious and sometimes fatal structural damage to the truss. Perhaps the vertical, non-structurally required, end-post was seen as serving as a bolster to protect the structurally important sloped member behind it.

Pratt trusses. The Pratt configuration presents a similar set of issues. Its configuration reverses that of the Howe



Railroad bridge, a Howe with sloped end posts. Danbury, Iowa.



Wagon bridge, a Howe with vertical end posts. Prairie Du Sac, Wis.



Typical slope-ended Pratt. The first vertical at each end is a tensile member. Elba, Wis.

by having tensile diagonals and compression verticals. The Pratt configuration, patented in 1844, did not become popular until the use of wrought iron became economically practical several decades later. Since the Pratt configuration was not initially used to support covered bridges, the use of vertical end posts is not directly related to the perpetuation of a common former configuration. However, the original patent drawing showed vertical ends, and that may have influenced others to continue to do so rather than to question their need.

The concept of protecting truss ends from collisions remained viable. After iron-truss building entered the age of prefabrication, railroads tended to keep stockpiles of spare parts to minimize down time after a bridge was damaged. Thus it might have been less expensive to maintain the rhythm of rectangular panel shapes for end panels, as well as mid-span panels, because they were available in the fabricating plant. Not only does the slope-end variation of the Pratt have four fewer members, it has fewer heavier (and therefore more expensive) compression verticals.

Another factor that may have influenced designers to provide a structurally unnecessary vertical end was the perception by various communities that a vertical portal would provide a more gracious or dignified entrance to their bridge and serve as an expression of civic pride.

Lattice and Warren trusses. One of the earliest American truss designs was Ithiel Town's timber lattice truss, patented in 1820. It consisted of a pattern of closely spaced crossing



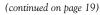
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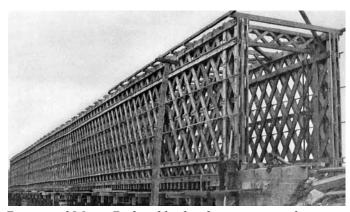
Onion Creek Bridge, Coffeyville, Kan., a Pratt with vertical end.

diagonals that formed an almost solid texture that acted as a fabricated girder. The ends were always vertical. It was a commonly used design for covered wagon bridges, and although not as popular as the Howe, was also used by the railroads.

The Warren truss, patented in Great Britain in 1849, features a web of contiguous alternating sloped diagonals. Numerous variations of this basic shape incorporating subdivided and vertical members were developed. While logic might suggest that all Warren through trusses be slope ended, since extending the top chord to the abutment serves no structural purpose, some Warrens, with webs that contained subdividing verticals, were built with vertical ends. Additionally, double, triple, and multiple sets of superimposed staggered Warren configurations with overlapping diagonals were developed. Multi-intersecting variations containing three or more sets of Warrens are often referred to as lattice trusses. The timber Town truss, although developed much earlier, is a form of multiple Warren.

The vast majority of metal lattice through trusses, popular with the railroads towards the end of the 19th century, have sloped ends. There is no standard for determining just how many intersections are required before a multi-intersecting Warren becomes a lattice. However, when there are four or more intersecting sets, it is most likely to be called a lattice truss. The sloped end requires the introduction of a vertical tension member, which breaks the texture and repetitive visual rhythm of the web. However, it reduces the overall truss weight thereby saving material and cost. Despite the





Boston and Maine Railroad bridge, lattice truss with vertical ends under construction at Sheldon Junction, Vt.



Warren truss with vertical ends. Examples in the U.S. are very rare; this example is located in Russia.

#### Keep Your Society Moving Forward

This is your opportunity to help maintain the quality, strength, and diversity of leadership that has kept the SIA growing for more than three decades. You can nominate candidates to represent your society.

SIA's leaders are expected to consider and reflect members' interests in carrying out the business of the SIA. They represent the SIA to other organizations, recruit new members, and plan the future of the society.

In 2010, there will be several openings: one for President, Vice President, Secretary, and Treasurer; two on the Board of Directors, one on the Nominations Committee. We need candidates willing to give back to the SIA by volunteering their time, knowledge, and experience. The Nominations Committee is depending on you to identify members friends, colleagues, or perhaps even yourself—who are qualified and willing to serve. (If modesty precludes selfnomination, please find someone to nominate you.) Each candidate must be an SIA member in good standing and must consent to being considered for nomination.

The deadline for nominations is Jan. 29, 2010. If you have any questions or need information, please don't hesitate to contact: Christopher H. Marston, Chair, SIA Nominations Committee, 9500 Seminole St., Silver Spring, MD 20901; (202) 354-2162; christopher\_marston@nps.gov.

#### Positions Open in 2010:

**President** (two-year term). The President is the SIA's executive officer, supervising all the business and affairs of the society, including chairing meetings of the Board of Directors and presiding at the Annual Business Meeting of the membership. The President also represents the society to other organizations. For two years after his or her term expires, the President serves in an ex officio capacity as Past President, continuing to be a voting member of the board. The Past President is traditionally the appointed member of the Nominations Committee. (Note that this means an effective four-year term, two years as President, and two years as Past President.)

**Vice President** (two-year term). Serves as a member of the Board of Directors; chairs Board meetings and carries out other official presidential functions in the President's absence. The Vice President traditionally is elected President at end of his or her term in order to provide continuity of leadership. Candidates for Vice President must have previously served on the Board for a minimum of one year as a voting member. Traditionally the VP runs for President of the Society.

**Secretary** (three-year term). Serves as a member of the Board of Directors, takes official minutes at board meetings and the annual business meeting, and maintains the official records.

**Treasurer** (three-year term). Serves as a member of the Board of Directors and maintains the SIA's accounts and financial statement.

**Directors** (three-year term). Two of seven director positions on the Board of Directors are open this year. The board meets approximately four times per year (both in person and online) including during the annual conference. Directors govern official business of the SIA and chair committees that oversee operations such as publications, grants, and local chapters.

Nominations Committee Member (3-year term). One of three elected members of the committee that assists in recruiting and evaluating nominees and in monitoring the election at the annual conference. It is expected that the newly elected member will chair the committee during the final year of the term.

All nominations will be reviewed by the Nominations Committee, which will present a slate of candidates to the membership. Each nomination must include the name, address, telephone number, and e-mail address of the person being nominated; the office for which the nomination is being made; and evidence that the candidate consents to being nominated. Once the slate is selected, the Nominations Committee will request a brief biographical statement and a photograph from each nominee.

For summaries of the nomination process and responsibilities of SIA officials view the by-laws on the About screen at *www.siahq.org*. If you're unsure about the process or the obligation, please call or write one of the committee members.

#### **Current SIA Officers and Directors**

Mary Habstritt, President (2008-2010) Jay McCauley, Vice President (2008-2010) Robert Stewart, Past President (2008-2010) Nanci K. Batchelor, Treasurer (2006-2010) Richard K. Anderson, Jr., Secretary (2006-2010) Diana Bouchard, Director (2007-2010) Betsy Fahlman, Director (2007-2010) Perry Green (2008-2011) Amanda Gronhovd (2008-2011) Tim Mancl (2008-2011) Carol Litchfield (2009-2012) Bill Vermes (2009-2012)

#### Nominations Committee

Christopher Marston, Chair (2007-2010) Erin Timms (2008-2011) Rachael Greenlee (2009-2012) Robert Stewart, ex officio (2008-2010)



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COMPILED BY

Fall 2009

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

#### **GENERAL INTEREST**

- Bryan D. Donaldson. Bricktown USA: Mount Union PA: Volume Two. 2009. 274 pp., illus. \$34.25. Photographs, mostly dating from 1900-1950, document local industries, businesses, and the East Broad Top RR. Avail: Friends of the East Broad Top, Box 145, Leetsdale, PA 15056; *febtstore@comcast.net*.
- Jessica DuLong. My River Chronicles: Rediscovering America on the Hudson. Free Pr., 2009. 299 pp. \$26. Looking out from the engine room of the historic fireboat *John J. Harvey*, DuLong explores what we are losing as hands-on work and mechanical know-how disappear along with industry along the Hudson River and throughout America. Along the way she talks to preservationists and industrial archeologists about the value of preservation and interpretation of maritime and industrial history. DuLong was the opening speaker at SIA's 2009 Fall Tour.
- Betsy Fahlman [SIA] and Eric Schruers. Wonders of Work and Labor: The Steidle Collection of American Industrial Art. Penn State Earth & Mineral Sciences Museum & Art Gallery, 2008. 176 pp., illus. \$50. Handsomely produced, gallery-quality book illustrates the marvelous collection of paintings and other art in the museum's collection. Edward Steidle, Dean of the Penn State Earth & Mineral Sciences College (1929-53), established the collection to chronicle the critical role that the minerals industry (broadly defined) played in building the nation. Much of the artwork depicts the coal, steel, and oil industries in Pennsylvania.
- Joshua Ferris. The Valetudinarian. The New Yorker (Aug. 3, 2009), pp. 58-66. This fictional short story has little to do with industry, but scholars of IA in literature might be intrigued by the mention of "an old rotary [telephone] that vibrated with the vigor of the Mechanical Age."
- Full Steam Ahead. I&T (Fall 2009), pp. 49-56. Features places where steam power is alive and well, and open to the public: Sturgeon's Lumber Mill (Sebastopol, Calif.), Steamship Virginia V (Seattle, Wash.), Stanley Steamer Wagons (Auburn Heights, Yorklyn, Del.), Rough & Tumble Museum (Kinzers, Pa.), and Durango & Silverton RR (Durango, Colo.).
- Meghan Hogan. 1934: A Stimulus Package for the Soul. CG (Summer 2009), pp. 20-31. Historical background of the Public Works of Art Project, launched in the first year of the New Deal. Much of the art produced had an industrial theme.
- Malka Simon. The Space of Production: Brooklyn and the Creation of an Urban Industrial Landscape. PhD. diss., N.Y. University, 2009. Uses Brooklyn's industrial neighborhoods as a case study to evaluate the impact of industry on the urban landscape, the forces driving the creation of a distinctive place,

and the role played by American industry in forging a new approach to architectural design.

- Matthew Stewart. The Management Myth: Why the Experts Keep Getting It Wrong. Norton, 2009. \$27.95. Stewart, a former management consultant, exposes the profession's longstanding chicanery and its roots in the work of Frederick Winslow Taylor, Louis Brandeis, and Frank and Lillian Gilbreth. The Gilbreths may be best known for their exploration of economies of scale in family life (documented by two of their twelve children in *Cheaper by the Dozen*), although Lillian Gilbreth also deserves credit for founding the home economics movement and helping the disabled. Rev.: *The New Yorker* (Oct. 12, 2009), pp. 114-122.
- Jean Thilmany. Time Warp: Engineers Use CAD and Other Modern Design Tools to Revive Inventions of the Past. Mechanical Engineering Magazine (Sept. 2009); www.memagzine. asme.org. Features the work of Bill Gould [SIA], a product designer who uses modern software to document historical technology for museums, including the Oakland (Calif.)-based Kinetic Steam Works Collective (www.kineticsteamworks.org). Also includes a brief history and goals of the SIA. For more info: www.gouldstudios.com.
- Gavin Weightman. The Industrial Revolutionaries: The Making of the Modern World, 1776-1914. Grove Pub., 2009.
   432 pp. illus. \$27.50. Survey of the Industrial Revolution and the usual list of great inventors and businessmen associated with its technological successes—Thomas Newcomen, Richard Trevithick, Oliver Evans, Cyrus McCormick, etc.

#### BRIDGES

- William E. Beyer. The History of the Veterans Memorial Bridge: 90th Anniversary Edition. Cleveland State University Library, 2009. 600 pp., illus. \$40 ppd. Avail: www. clevelandmemory.org/promos/bridge\_book\_2009.pdf. Formerly known as the Detroit-Superior High Level Bridge, this Cleveland landmark is an unusual and outstanding example of early 20th-century engineering. Book covers in depth, with profuse illustrations, the original construction in 1917 and major rehabilitations in 1967 and 1995-97.
- ◆ James Chiles. **Spanning the Ages**. *I*&*T* (Fall 2009), pp. 16-25. The origins of prestressing as a technique for strengthening concrete and building strong, inexpensive, and quickly assembled bridges.
- Eric DeLony [SIA]. Kintai Bridge in Iwakuni City. CHSA *Newsletter* No. 6 (Jan. 2009), pp. 2-4. This wood-arch bridge, intricately composed of 23,000 members, is a testament to

Japanese wood joinery skill. Built in 2005, it is an exacting replica of a bridge first built in 1673 and replicated several times since. The age-old preservation conundrum, "Is your father's axe your father's axe if the head and handle have been replaced?" plays out here in large scale. Some preservationists believe the bridge should be listed as a World Heritage site, others believe it lacks authenticity.

- Tony Dierckins. Crossing the Canal: An Illustrated History of Duluth's Aerial Bridge. Duluth: X-communication, 2008. 208 pp., photos, plans, maps. \$21.95. Some 35 years after a canal was cut through Minnesota Point, a unique bridge reunited Duluth with the community of Park Point. This heavily illustrated history tells the story of the famous bridge, originally a transporter bridge converted to a lift bridge, its keepers, and the communities it connects.
- Denis P. Gardner. Wood+Concrete+Stone+Steel: Minnesota's Historic Bridges. Univ. of Minnesota Pr., 2008. 221 pp.
   \$39.95. Explores the evolution of bridge building in Minnesota, chronicling construction materials and their relation to the progression of bridge types, as well as discussing notable bridge designs and designers. A chapter on preservation is a call to save these important historic structures.
- Golden Gate Bridge Suicide Net Must Look Historic. Contra Costa Times (May 21, 2009). Before installation of a controversial suicide barrier moves ahead, it must pass a critical review—it has to look good.
- Harvey Ettinger. Midtown Greenway Bridge Restorations to Begin. Hill and Lake Press (Sept. 18, 2009), p. 8. www. hillandlakepress.org. Brief history and description of efforts to preserve three reinforced-concrete bridges built by the Chicago, Minneapolis & St. Paul RR to span parkways in 1911-12. The bridges have Classical Revival details in keeping with their setting. Project historian is Bob Frame [SIA].
- Art and Lynnette Peterson. Chicago's Landmark Bridges No.
  6: Pennsylvania Railroad's Lift Bridge over the Chicago River. The Bulletin of the Railroad Station Historical Society, Vol. 42, No. 3 (May-June 2009), pp. 40-46. History, photos, and description of the vertical-lift bridge built in 1915.

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With Thanks.

- Tim Rausch. Building Bridges—and Employees—That Last. Augusta (Ga.) Chronicle (Feb. 9, 2009). History and current operations of the Augusta Iron & Steelworks (est. 1948). Fabrication shops supply structural-steel bridge components in the Southeast.
- Janet B. Van Doren and Dallas Joe Warner. Building Century Bridges. *Timeline*, Vol. 29, No. 4 (Oct.-Dec. 2009), pp. 26-37. Handsome stone arches built by the B&O RR near Lodi, Ohio, in 1905-06. Construction techniques and the challenges of satisfying local residents who wanted a say on how the railroad crossed local roads and streams.

#### MINES & MINING

- Peter Clarke. Brick by Brick: The Ganister/Silica Brick Industry. *Timber Transfer* (Spring 2008), pp. 10-23. Ganister, a silica-rich rock used to manufacture refractory bricks, was quarried in central Pennsylvania. History of quarrying, delivering the rock to brick kilns via railroad, and manufacturing the brick. Photos and map. *Timber Transfer* is published by the Friends of the East Broad Top, *www.febt.org*.
- Michael Pearson and B. McGowan. Mining in NSW: History and Heritage. Investment & Industry Dept., New South Wales Government, 2009. 248 pp., illus. \$60. Avail: I&I NSW Bookshop, orders@minerals.nsw.gov.au. Mining in New South Wales (Australia) from the first workings in Newcastle to the end of the mining boom in the early 20th c. Organized by 25 different mineral groups and associated sites. Life and work at the mines and mining camps.
- Pam Sohn. Preservation Prize. Chattanooga Times Free Press (July 3, 2009). Jaime Trotter, a historian with Alexander Archaeological Consultants, has been honored for nominating the old coal-mining ghost town of Shakerag to the National Register and ongoing work to save the 19th-c. site known as McNabb Mines in Marion County, Tenn.

#### **Power Generation**

- Frederick Dalzell. Engineering Invention: Frank J. Sprague and the U.S. Electrical Industry, 1880-1900. MIT Pr., 2009. 304 pp., illus. \$30. Sprague's pioneering achievements included self-governing motors, the nation's first full-scale operational electrical railway system (Richmond, Va.), electric elevators, and multiple-control systems for mass transit systems. Illustrates how Sprague cultivated his image as a "heroic inventor."
- Gabrielle Hecht. The Radiance of France: Nuclear Power and National Identity after World War II. MIT Pr., 2009.
   486 pp. \$25. Examines French culture, society, and politics to understand why France embraced nuclear power like nowhere else in the world.
- Patrick M. Malone [SIA]. Waterpower in Lowell: Engineering and Industry in Nineteenth-Century America. Johns Hopkins Univ. Pr., 2009. 272 pp., illus. \$25 paper. Innovative engineering helped make Lowell, Mass., a potent symbol of American industrial prowess. Waterpower spurred the industrialization of the U.S. and was the principal power for textile manufacturing until well after the Civil War. Examines how engineers created a complex canal and lock system in Lowell that harnessed the river and powered mills throughout the city. James B. Francis played a key role. An English immigrant who came to work for Lowell's Proprietors of Locks & Canals as a young man, he rose to become the company's chief engineer and managing executive. Linking Francis's life and career with the larger story of waterpower in Lowell, this is the definitive history of the design, construction, and operation of the Lowell canal system.

- David R. Stoecklein and Jack Goddard. Windmills of the West: Rural America's Most Important Invention. Hailey, Idaho: Stoecklein Photography & Publishing, 2009. 160 pp. \$16.95. Mostly color photographs, illustrating farm- and ranch-style windmills, as well as ranch scenes. Rev.: Windmillers' Gazette (Autumn 2009), p. 4.
- Matthew L. Wald. Industry Built from Scratch. *NY Times* (Oct. 15, 2009). An ethanol plant in Madison, Pa., operated by Coskata, is held up as an example of the growth of biofuel industry in the U.S. The plant converts wood scraps into ethanol at a cost of \$1/gallon, making it increasingly competitive.
- Windmillers' Gazette is a quarterly journal for the preservation of America's wind power history and heritage. Vol. 28, 3 (Summer 2009): Eclipse Junior and Eclipse Hustler Windmills: Two Failed Experiments in Cheapening Product Quality (two unsuccessful models produced by the Eclipse Wind Engine Co. of Beloit, Wis., in the 1890s); "We Never Throwed Much Out:" the Foodways of Windmillers in the Desert Southwest during the 1920s to 1940s (men who erected and maintained windmills ate lots of beans and canned foods). Vol. 28, 4 (Autumn 2009): T. Lindsay Baker, The Story of U.S.-Challenge Windmills (history and operation of Model 27 windmills, a self-oiling, back-geared mill, introduced in 1927 and very popular during WWII); How Windmill Companies Used Branch Houses and General Agencies to Conduct Business (sales agencies and practices); and The Wallenbeck Windmill and Patent Iron Tower (George Wallenbeck, an upstate New York windmill builder who patented a tower in 1889). Avail: Box 507, Rio Vista, TX 76093. \$20/yr.; www. windmillersgazette.com.

#### **IRON & STEEL**

 Geoff Weisenberger. Outer Strength, MSC (July 2009), pp. 47-50. Text and photos take the reader on a virtual process tour of Independence Tube's HSS (hollow structural section) mill in Decatur, Ala. Opened in 2006, the 310,000-sq.-ft. mill forms continuous steel strip into hollow square and rectangular sections, which are increasingly popular in steel structures.

#### **BUILDINGS & STRUCTURES**

- Brian A. Curran, Anthony Grafton, Pamela O. Long, and Benjamin Weiss. **Obelisk: A History**. MIT Pr., 2009. 384 pp., illus. \$27.95. Traces the fate and cultural meaning of obelisks, which serve no practical purpose, from ancient Rome to the U.S.
- Dr. Lionel Geoffrey Booth, 1929-2009. CHS *Newsletter*, No. 84 (Apr. 2009), pp. 1, 6. Remembrance of British structural and civil engineer who was an expert on timber shell roofs. He designed no less than 50 parabolic roofs from 1959 to 1972.
- Keith A. Douglas. Whiting-Turner—A Century of Construction. CHSA Newsletter No. 6 (July 2009), p. 9. Brief history of Baltimore-based contractor established by George W. C. Whiting and LeBaron Turner in 1909. Firm's early projects included roads, curbs and sewers at Walter Reed Hospital and many bridges, dams, industrial plants, and commercial buildings in the Mid-Atlantic.
- Johnny Edwards. **Group Asking to Save Chimney**. *Augusta* (*Ga.*) *Chronicle* (Mar. 24, 2009). City needs to raise \$192,000 to preserve the 176-ft.-tall, brick, Confederate Powder Works Chimney, which is in a deteriorated condition.
- Feature Elevator. Country Grain Elevator Chronicles (Summer 2009), pp. 2-3, 5 + cover photo. History and description of a

c.1890 timber-crib elevator in Ross, Iowa. Family-owned since the early 1950s, it is no longer used and deteriorating, but family desires to list it on the National Register and come up with some means for restoring it. Published by the Country Grain Elevator Historical Society, 155 Prospector Trail, Bozeman, MT 59718.

- Historic Lime Kilns at Risk in S. Indiana. *Courier-Journal* (May 30, 2009). The three kilns date to the 19th century, remnants of an industry that burned limestone into lime and shipped it to cities along the Ohio River to make bricks, mortar, and plaster.
- Nigel Isaacs. Early New Zealand Bricks. CHS Newsletter, No. 84 (Apr. 2009), pp. 2-3. British colonists established the first brickworks in New Zealand about 1840. History of manufacture and use.
- George B. Johnston. Drafting Culture: A Social History of Architectural Graphic Standards. MIT Pr., 2008. History of the development of the standards that came to be the "bible" of 20th-century architectural practice, as well as analysis of the social status of draftsmen. Rev.: CHSA Newsletter (Apr. 2009), p. 5.
- Mary Landers. LNG Raisin' the Roof. Savannah (Ga.) Morning News (Mar. 20, 2009). www.savannahnow.com. Describes the fabrication and lifting into place of a liquefied natural gas tank roof. Includes photos and video.
- Wrecking Team Is Back at Tiger Stadium. Detroit Free Press (June 9, 209). A judge has cleared the way for the final phase of the ballpark's demolition, and preservationists announced they were giving up their long, passionate but ill-funded fight.

#### WATER TRANSPORT

- Roy A. Hampton III. Innovation on the Monongahela River: The Design and Construction of Braddock Dam. Pittsburgh District, U.S. Army Corps of Engineers, 2009. History of Locks and Dams 2 and 3 of the Monongahela River Navigation Systems, and their replacement with the new Braddock Dam & Locks, built using innovative in-the-wet construction methods involving precast, hollow, concrete segments eliminating the need for coffer dams [tour site—2009 SIA Annual Conference].
- Gerard Koeppel. Bond of Union: Building the Erie Canal and the American Empire. Da Capo Pr., 2009. Emphasis on the politics behind the canal's planning beginning about 1800 until its completion in 1825. Also includes details of construction. Rev.: CHSA Newsletter (Apr. 2009), p. 5.
- Pamela O. Long, David McGee, and Alan M. Stahl, eds. The Book of Michael of Rhodes: A Fifteenth-Century Maritime Manuscript. 3 vols. MIT Pr., 2009. Never-before published or translated manuscript by a Venetian mariner, describing his experiences in the merchant and military fleets. Includes treatises on shipbuilding, navigation, calendrical systems, mathematics, and astrological ideas. Vol. 1 is a facsimile of the manuscript, Vol. 2 is a translation into modern English, and Vol. 3 is historical context by modern scholars.
- Clay Risen. A Recovering Eastern Germany, From a Canal's-Eye View. Washington Post (Oct. 18, 2009). Describes a canoe trip on the Finow Canal, extending from Berlin's outskirts toward the Polish border. Built in the early 16th century, destroyed during the Thirty Years' War, and rebuilt by the Prussians, it was bypassed by the Oder-Havel Canal in 1914. The Finow Canal was restored for "water tourism" in the 1990s.

#### **AUTOMOBILES & HIGHWAYS**

- David Bacon. A Tribute to NUMMI Workers. East Bay Express, Vol. 31, No. 48 (Sept. 9-15, 2009), pp. 12-13. Photographer David Bacon documented workers at New United Motor Manufacturing, Inc. (NUMMI) in Fremont, Calif. Opened as GM Fremont in 1962; the plant closed in 1982 and reopened in 1984 as a joint GM-Toyota venture. GM withdrew from the partnership in June 2009 and Toyota recently confirmed that it would close the plant in Mar. 2010.
- David Louter. Windshield Wilderness: Cars, Roads, and Nature in Washington's Parks. Univ. of Wash. Pr., 2006. 288 pp., illus., maps. \$35. Analyzes the complex relationship of cars, roads, and national parks, and the shaping of parks to accommodate automobility. Case studies examine Mt. Rainier, Olympic, and North Cascades national parks. Rev.: CRM (Winter 2009), pp. 78-9.
- Phil Patton. A Dreamer's Machine, More Promise Than Reality. NY Times (Sept. 27, 2009). Recalls the history of the Davis Divan, a three-wheeled, streamlined automobile introduced after WWII. The Davis enjoyed a brief period of popularity in the press, but was never a commercial success, perhaps offering a cautionary tale to today's entrepreneurs rushing to develop futuristic electric cars.
- Michael S. Rosenwald. For Killed Clunkers, a Long Journey to Auto Heaven. Washington Post (Aug. 20, 2009). The current federal "Cash for Clunkers program ... is bringing into focus the \$22-billion-a-year auto recycling business and its many colorful characters." Article describes D.C.-area recycling businesses such as Brandywine Auto, founded in 1927.
- Don Sherman. **One Step Closer to the No-Iron Car**. *NY Times* (Oct. 25, 2009). Chronicles the 30-year effort of N.J. engineer Matti Holtzberg to develop and market a viable plastic engine block. Draws parallels to Henry Ford's fascination with plastic as an automobile material, including his experimental 1941 car with plastic body panels.
- Peter Whoriskey. As Cheaper Chinese Tires Roll In, Obama Faces an Early Trade Test. Washington Post (Sept. 8, 2009). Cooper Tire & Rubber Co. closed its Albany, Ga., plant on the eve of U.S. government consideration of whether to impose a tariff against tires imported from China. Accompanying graphic documents the shift in tire production overseas.

#### RAILROADS

- Howard Ande. Flyover Country. NRHS Bulletin (Summer 2009), pp. 4-23. Photo essay explores good spots for train spotting and photography in the rural Midwest, with a focus on regional short lines.
- Michael T. Burkham. Pennsylvania Shortlines. NRHS Bulletin (Spring 2009), pp. 4-15. Locomotives and operations, many photos of industrial settings, primarily focused on the 1990s.
- John C. Dahl. Miss Phoebe Snow's Mansion on the Waterfront. NRHS Bulletin (Spring 2009), pp. 40-43. The Delaware, Lackawanna & Western terminal in Buffalo, N.Y. History and photos prior to demolition in 1980.
- Stanley Dunlap. Casey Jones' Home Gets a Lived-In Look. The Tennessean (July 16, 2009). The famed engineer's home in Jackson, Tenn., has re-opened as a historic house museum with period furnishings. Jones died in 1900 saving lives during a train wreck and was immortalized in song. Adjacent to the house is a new 8,000-sq.-ft. museum of memorabilia and artifacts.

- Tracy Fitzpatrick. Art and the Subway: New York Underground. Rutgers Univ. Pr., 2009. 304 pp., illus. \$29.95. Explores artistic production surrounding the subway system, from just before its opening in 1904 to the present day. Offers perspectives on ways in which the subway has been used as a subject about which to make art, as a site within which to make art, and as a canvas upon which to make art.
- Steve Jessup. A 40th Anniversary Tribute: Union Pacific's Big 40s. NRHS Bulletin (Spring 2009), pp. 20-35. Eight-axle diesel locomotives introduced in 1969. History, operations, extensive photos. Most were scrapped in 1985. A dozen have been preserved and are on display at various locations.
- Bill Malony. Chicago & Alton's Dwight, Illinois, Depot. NRHS Bulletin (Spring 2009), pp. 16-19. Historical background of the Richardsonian depot, built in 1892.
- Stan Rhine. Fencepost Ugly: The Transitional Era of the Gas-Electric Car. NRHS Bulletin (Summer 2009), pp. 24-43. Self-propelled cars that used an internal-combustion engine driving a generator to produce electricity that was fed to truckmounted traction motors. A popular alternative to steam locomotives for low-volume local and branch line passenger service in the first half of the 20th century. Nice summary of their history, manufacture, operations, and preservation status.
- Thornton Waite. Depots Added to the National Register of Historic Places—2008. The Bulletin of the Railroad Station Historical Society, Vol. 42, No. 3 (May-June 2009), pp. 33-40. Round-up and brief descriptions of each of the depots listed in the nation's official registry. An impressively long list.

#### **ABBREVIATIONS:**

CG	= Common Ground, published by the National Park Service
CHS	= Construction History Society (U.K.)
CHSA	= Construction History Society of America
CRM	= CRM: The Journal of Heritage Stewardship, published by the National Park Service
I&T	= American Heritage's Invention & Technology
MSC	= Modern Steel Construction, published by American Institute of Steel Construction
NHRS	= National Railway Historical Society
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.

# The Historic Bridge Foundation

Regardless of where you travel in the U.S., you are certain to come across an historic bridge. Metal-truss, stone arch, or suspension, historic bridges tell us about the industrial, technological, and economic growth of our nation. Yet bridges stand among the most endangered historic artifacts from our past. Many bridges remain functional as key elements in our present-day roadway system, and their historical significance is often overlooked, and efforts to modernize our road system and maintain functionality have placed many historic bridges in danger of destruction.

In 1998, Kate Johnson of Kyle, Texas, took this threat to heart and established the Historic Bridge Foundation (HBF) to help preserve historic bridges in Texas. Working closely with the Texas Historical Commission and Texas Department of Transportation, she began contacting local groups and county historical commissions to discuss the value of preserving Texas bridges and offer assistance in writing National Register nominations and serving as a consulting party in the Section 106 process.

Over a decade later, HBF is now recognized as the leading advocacy organization for historic bridges throughout the nation. HBF serves as a clearinghouse for information on the preservation of endangered bridges and proactively works with concerned citizens and public officials to devise reasonable alternatives to the demolition of these cultural and engineering landmarks.

HBF works to help federal, state, and local officials recognize that local citizens have an interest in preserving bridges for reasons in addition to engineering significance. Historic bridges on rural county roads often provide a sense of history and rural character that bring pride to the local residents. Maintaining bridges in a community may also provide a benefit in terms of economic development to the area through heritage tourism.

HBF recognizes that while not all old bridges should or can be preserved, it is critical that real consideration be given to their historical value. HBF promotes the belief that with careful planning and active repair/maintenance programs, a substantial number of historic bridges can be preserved without disrupting the effectiveness of efforts to provide safe transportation and economic development.

To learn more about how HBF can work with your community to save historic bridges, contact Kitty Henderson, Executive Director; (512) 407-8898; *kitty@historicbridgefoundation.com*. The foundation's website can be found at *www.historicbridgefoundation.com*.

Kitty Henderson



Swing-span bridge in Vida, La.

## **MEMBER NEWS**

The SIA notes with sadness the passing of **Clyde W. "Red" Hare** (1929-2009), a former Three Rivers Chapter member who was active in SIA events in and around Pittsburgh. Clyde was a freelance photographer for more than 50 years. U.S. Steel, Westinghouse, and Heinz were among his corporate clients. His photography often featured industrial subjects, with a special focus on workers. Clyde's work is found in the collections of the George Eastman House, the Carnegie Museum of Art, and the Senator John Heinz History Center (tour site—1993 and 2009 SIA annual conferences), and it has been gathered in several books, including *Clyde Hare's Pittsburgh.—Pittsburgh Post-Gazette* (*Oct. 16, 2009*)

Lucy B. Wayne became President of the American Cultural Resources Association (ACRA) at the 2009 annual confer-

ence held in Providence, R.I. Lucy is co-owner of SouthArc, Inc., Gainesville, Fla. (www.southarc.com). She encourages cultural resource management (CRM) firms to join ACRA, the only trade association for the industry. ACRA member firms employ archeologists, architectural historians, architects, historians, preservation planners, and photographers. ACRA is regularly invited by federal agencies to provide input on cultural resource issues. It also provides support for state and local level issues when requested by member firms. In addition, ACRA compiles information on the CRM industry, including a biannual salary survey and occasional economic surveys. ACRA maintains a searchable database of CRM consultants on the organization's web page, www. acra-crm.org. Contact Lucy (lucy@southarc.com) if you have questions about ACRA or information you would like to share with ACRA members.

# The 14th International TICCIH Congress, Freiberg

The 14th International Congress of the Committee for the Conservation of the Industrial Heritage (TICCIH) was held in Freiberg, Germany, from Aug. 30 to Sept. 5. The Technical University and Mining Academy of Freiberg was host for the event attended by approximately 350 participants from 38 countries. Sixteen participants were from the U.S. During the course of three and a half days of paper sessions, participants could choose among 190 papers in 23 sessions, in addition to five workshops and a poster session. The Congress included two tours: to sites in the lignite region of the nearby state of Brandenburg; and, via steam train, to the industrial museum and sites in the city of Chemnitz. The TICCIH General Assembly elected Patrick Martin [SIA Executive Secretary and Journal Editor] as the new president of TICCIH.

The old medieval city of Freiberg, largely dating to the 16th century, and still partly surrounded by its medieval walls, is less than a half-mile in diameter, and the three conference venues, in facilities provided by the university, were easy to reach. Social events included an opening reception in the Freudenstein Castle, two concerts, an evening of movies, and a farewell garden party, concluding with fireworks. The Congress was extremely well organized, and, but for some damp weather on the final day, all events went off without a hitch. High praise is due Conference Chairman Helmuth Albrecht, and his team of students and faculty from the University's Institute for the History of Science and Technology.

Freiberg sits in the foothills of the Erzgebirge, or Ore Mountains, the range which forms the border between Germany (the State of Saxony) and the Czech Republic. The discovery of rich deposits of silver and tin in the 15th century, and later other metals, led to rapid settlement of the region, and in 1765 to the founding of the Technische Universität Bergakademie Freiberg, the oldest university of mining and metallurgy in the world. A nomination of the Erzgebirge to the World Heritage List has been in development for several years, and it was discussed in one of the paper sessions. Indeed, mining landscapes, both on and proposed for the World Heritage List, were a frequent topic at the Congress.

Congress Opening and Theme. The theme of the Congress was "Industrial Heritage, Ecology and Economy," drawing its inspiration from the radical transformation that has altered the face of Eastern Europe, particularly since the fall of the Berlin Wall in 1989. In his opening address, Albrecht noted the importance of the theme in the eastern part of Germany where rapid de-industrialization, coupled with globalization, has put extraordinary pressure on historic industrial monuments. A recent survey has identified over 100,000 monuments in Saxony, which has one of the richest collections in Germany. Albrecht called for a change in public policy to take into consideration Saxony's industrial heritage in the face of development pressures. The State of Saxony had been extremely generous in its support, he said, and hoped that the TICCIH Congress would further the debate and help revive and maintain the social fabric of communities.

The Saxon State Minister of Higher Education, Research and Fine Arts, Eva-Maria Stange, echoed these points. She told listeners that Saxony had been the first German state to specifically recognize monuments of industrial heritage in its legislation, which was later picked up by West German law. Reinforcing Albrecht's call, she noted that protection was a "challenge in a time of weak public finance." Her ministry is in the process of creating a union of all industrial museums in Saxony, but there is urgent need for a re-survey of the heritage, a new financial structure, and competence in the field to carry on this work.

Sir Neil Cossons provided a summary of TICCIH's early history, reminding participants that it had been 36 years since the first congress in Ironbridge in 1973, where there had been 61 invited delegates from eight countries. In 1973 the past was becoming popular, and industrial heritage came of age. IA struck a chord, but today the cause of indus-



Past and new presidents of TICCIH, Eusebi Casanelles (left) and Patrick Martin.



1959 locomotive, DR 65.1049, one of the last steam locomotives produced by the GDR.

trial preservation no longer seems self-evident. The collective memory of industrial workers is disappearing. "The past is a foreign country; they do things differently there," he said, to quote E.P. Hartley's famous 1951 line. We need to re-articulate the need for preserving our industrial heritage; failure to do so would be at our peril.

Heritage Landscapes and the Tour of the Brown-Coal Region. The challenges of landscape conservation and reclamation figured in many of the congress papers. As if to illustrate a landscape success story, the tour of the browncoal region of Brandenburg showcased the work of the International Building Exhibition (IBA or Internationale Bauhausstellung) in transforming vast open-cast brown-coal mining areas that had been the source of much of the GDR's electric power and heavy industry. Artifacts of this landscape included one of the earliest brown-coal power plants in the area at Plessa (transformed to a venue for special events); an enormous overburden conveyor bridge ("F60") built to increase the output of brown coal in open-cast mines; and the Bio Towers in Lauchhammer, sole surviving evidence of a vast coking plant. The towers were built-uniquely-to purify coking plant wastewater through bacterial decomposition of toxic phenolic compounds. Many of the open-cast mines are now being flooded, with beaches and resort areas expected to open by 2015.

A pair of paper sessions organized by Bode Morin looked at challenges and opportunities for industrial landscapes in the U.S. Pat Malone looked at new trends in the interpretation of environmental history in the industrial landscape of Lowell; Morin at the effect of environmental policy on copper smelting sites in Tennessee, Montana, and Michigan; Greg Anderson at the preservation challenges of Pennsylvania's anthracite region; and Fred Quivik [all SIA] on the impact of Superfund programs at Anaconda and Butte in Montana. The full list of papers can be found at *www.ticcih2009.de*.

Chemnitz Tour. The conference's second tour, to Chemnitz (previously known as Karl-Marx-Stadt during the GDR), began at the Freiberg railway station, where participants were greeted by DR 65.1049, one of the last steam locomotives built by the Deutsche Reichsbahn, in 1959, hauling vintage GDR coaches. Chemnitz, about 20 miles southwest of Freiberg, was the third largest city in the former GDR, although since re-unification the city has lost nearly a quarter of its population and much of its heavy industry. The morning venue was the Industriemuseum Chemnitz, located in a former textile machine and machine-tool foundry. The foundry spaces displayed a wide range of exhibits, from the Trabant motor car, made not far away in Zwickau, to various products of Chemnitz's heavy industry. A bus tour in the afternoon traveled to four former industrial sites: the Saxon Loom Manufactory; the Bernhard Spinning Company, one of Germany's oldest textile factories, built on the model of Richard Arkwright's 1771 spinning mill at Cromford; the timber-framed two-story hall of the Saxon Knitting Machine Co.; and the Wanderer-Werke site, a large complex of buildings begun for the manufacture of bicycles in 1885, but dominated today by early and mid-20th-century facilities built to manufacture everything from bicycles and typewriters to milling machines, automobiles, and aircraft engines.

TICCIH General Assembly. The outgoing president, Eusebi Casanelles, was elected an Honorary Life President, and two new life members were named, Werner Kroker and Jaume Matamala i Cura. The chief business of the Assembly was the election of new officers. Patrick Martin, unopposed, was elected unanimously as TICCIH's new president. In his acceptance speech, he credited Eusebi Casanelles for many of the improvements to TICCIH over the preceding nine years, including improvements to the Bulletin, improved circulation of information and the TICCIH web pages, and efforts to expand TICCIH's membership, especially into Latin America. Martin promised to continue the improvements already begun and search for ways to refine the structure of the organization, strengthen TICCIH's affiliations with other organizations, and further develop its relationships with ICOMOS and UNESCO.

The final formal event of the Congress was a garden party at the "Beach Club" immediately outside Freiberg, featuring a charcoal burning demonstration, dinner, and fireworks.

> Peter Stott TICCIH National Representative



Biotowers in Lauchhammer.





Parade of Miners and Iron Workers of Freiberg.

#### FALL TOUR REVIEW (continued from page 5)

pants, courtesy of our hosts, the property owners Michael and Arikka Pavlov. This slim volume is a rich resource on the geology, manufacturing process, and industrial remains. An earlier article on this subject by Howe appeared in the *IA* journal, Vol. 33, No. 1 (2007).

During the construction of the Erie Canal in 1817, natural cement was discovered in Fayetteville. Eight years later, the Delaware & Hudson Canal was built to carry coal from Honesdale, Pa., to the Hudson River, thereby creating a demand for a source of cement convenient to the canal route. The D&H Canal Museum and Five Locks Walk in High Falls offer excellent interpretation and a rich, accessible site. The museum is stocked with displays, artifacts, maps, and a charming working scale model of a canal lock. Much of the museum's interpretation focuses on life along the canal. Young men growing up on the canals could hope to be captains of their own boats by the age of twenty. Though tiring and endless, involving much waiting at the locks, work on a canal boat offered more independence than was found in the cement works. Today this 19thcentury water highway is dry, with trees sprouting between its remaining stones.

When the Iron Mountain data storage site made a last minute cancellation, it was replaced with a visit to the Hansen grist mill in Stone Ridge. The private lane could not accommodate a bus, so SIA members disembarked and walked to the site. Until the late-19th century, this creekside custom mill ground grains for local families. No cash exchanged hands; instead, the miller retained a percentage of each family's milled product. About a century ago a hurricane knocked out the dam, and the mill has sat idle ever since except for an occasional start-up for demonstration purposes. Owned by the same family for 90 years, the wooden equipment looks like it's ready for the next crop.

For 220 years Tuthilltown Grist Mill, now **Tuthilltown Spirits**, was a water-powered mill. In 2001, Vicki Morgan, Brian Lee, and Ralph Erenzo began converting one of the Tuthilltown granaries into a micro-distillery. Using discarded scraps from an apple slicing plant, they began production of vodka in 2003, then moved on to grain-based liquors, making the first pot-distilled whiskey legally produced in New York since Prohibition. Today, Tuthilltown has since upgraded to a German, custom-made, copper distiller. Try the Hudson Baby bourbon whiskey - "mildly sweet ... with hints of vanilla and caramel ... bright to the tongue and warming all the way down."

Two groups traveled on Sunday to the **Historic Kingston Waterfront Museum** to board **PT 728**, the sole surviving US-built Vosper-designed hull. Built in the Annapolis Yacht Yard under license from the British company Vosper, *PT 728* was launched on Sept. 25, 1945. She was slated to join the Soviet Navy, but with WWII at an end, she was decommissioned o Nov. 28, 1945. Today, this boat is the only U.S. Coast Guard-inspected PT boat licensed to take passengers for hire.

After an enjoyable ride, SIA members toured **Clermont State Historic Site**. Established in 1728, the 500-acre waterfront estate was, for over two centuries, home to the politically and socially prominent Livingston family. Robert R. Livingston partnered with Robert Fulton in 1807 to start the first steamboat business offering service between New York City and Albany.

In the epilogue of his book on the Rosendale Cement Works, Dennis E. Howe writes that "industry, more than any other single activity, defines a community." In My *River Chronicles* Jessica DuLong asks, "What will we lose as a culture, a nation, if we continue to devalue production and manufacturing?" The mid-Hudson River Valley yet produces felt, barbed wire, spirits, and art castings. America must embrace and elevate the practice of sustainable, skilled, making and repairing things that we need for our life, for our liberty and for our happiness.

Thanks to Dennis Howe for proposing the tour and introducing the SIA to Rosendale cement. Thank you to those who hosted us at each site, especially Michael Pavlov, Dietrich Werner, and the staff of the D&H Canal Museum, and to our tour guides and wranglers, including Russ Lange and Kevin McEvoy. Special appreciation goes to Ann Loeding whose many local acquaintances and knowledge of the area made this tour possible, educational, and enjoyable.

Lisa Austin

## Sign Up for SIA E-News!

The SIA now offers a fast and easy way to keep up-todate on the most current SIA happenings. It's simple. Go to the SIA website (*www.sia-web.org*), click on the "sign up for our e-mail service" button, then enter your e-mail address and sign up for the main list. You can choose from a number of other lists, such as chapters and events.

The e-mail is an opt-in, value-added project. That is, we do not get your e-mail address from our membership database. Rather, you need to opt-in by supplying your address. The e-mail program does not replace any of our publications or event materials, but it does add value by more timely notification of publication content, events, and other useful information. E-mails will be sent about once every six to twelve weeks.

We have selected a service company, Constant Contact, to provide member e-mail services. This is strictly an outbound e-mail service to you. Most of us detest spam or "unsolicited commercial e-mail" in official parlance. Constant Contact is extremely vigilant about not permitting spam to be sent. It has long been SIA policy not to furnish member names and addresses to outside parties, a policy that applies to your e-mail address as well.

Please join the e-mail program!

# Fireless Locomotive Donated to B&O Museum

The Smithsonian's National Museum of American History has donated a 1938 fireless steam locomotive to the Baltimore & Ohio RR Museum in Baltimore. B&O Museum Executive Director Courtney Wilson said, "This locomotive is a scarce type of railroad motive power not represented in our unparalleled collection of 19th- and 20th-century steam locomotives. It fills an important gap, and we are extremely pleased to accept this gift from the Smithsonian."

The locomotive was built by the Heisler Locomotive Works in Erie, Pa., for the Potomac Electric Power Company (Pepco) in 1938. The 35-ton locomotive did not need a fire to produce steam; instead it was filled with steam and superheated water (that turned to steam when the pressure was released) from the power plant's boilers under high pressure at temperatures around 400F°. The locomotive was capable of operating by itself for approximately five hours on one charge. In the U.S., fireless locomotives ran within some of the largest coal-fired power stations operated by utilities. The locomotives needed to remain close to the plant in order to be recharged. An early example of green technology, the fireless locomotive emitted only steam vapor, although that steam was produced in the plant by burning coal unlike other locomotives which released smoke exhaust.

From 1938 until 1974 the Pepco locomotive operated at the Buzzard Point Power Station in Washington,



Potomac Electric Power No. 43 now resides under the rotunda of the B&O RR Museum Roundhouse in Baltimore.

D.C. hauling coal. From 1974 to 1978 it was used at the Potomac River Power Station in Alexandria, Va. In 1979 Pepco restored and donated the locomotive to the National Museum of American History's Work and Industry collection. The PNC Foundation, the charitable giving arm of the PNC Financial Services Group, Inc. and Century Engineering, Inc. underwrote the move of the historic locomotive. Info: (410) 752-2490; www.borail.org.

## **CONFERENCES & WORKSHOPS**

Call for Papers. The Construction History Society of America announces its second meeting to be held on May 20-22 at the University of Pennsylvania, Philadelphia. The program committee wishes to encourage a broad range of papers dealing with any aspect of construction history. Preference, however, will be given to papers focused on the urban development of 19th- and early 20th-century American cities. This includes not only the physical results (infrastructure and building) but also the processes used in their development. Papers dealing with Canadian, Mexican, and Latin American locations are welcomed. Presenters may register for the conference at a reduced rate, but no assistance can be extended for travel and other expenses. CHSA was formed in 2007 in response to a growing level of interest among academics and practitioners. The association operates as a branch of the Construction History Society of the U.K. and maintains links with other international societies. Authors interested in presenting a paper are invited to submit an abstract (250-400 words). Those wishing to organize a session around a theme are invited to submit an outline of the subject listing no more than three proposed speakers, their topics, and full contact details including those of the session chair. Submittals

should be sent as a PDF to *chs@coa.gatech.edu* by Jan. 16. Further information may be requested, and final advice will be given concerning acceptance or otherwise by Feb. 15. Presentation materials will be required by Apr. 30.

The **7th Biennial Preserving the Historic Road conference** will be held in Washington, D.C., Sept. 9-12, 2010. The planning committee currently is seeking paper abstracts. The deadline for submissions is Jan. 31. The committee invites papers that showcase issues related to historic roads and road systems: historic road inventories, safety innovations, preservation policy, transportation policy, pavement and materials science, roadside architecture, cultural landscapes, historic road tourism development, etc. The committee also welcomes thematic interpretations of historic road or road culture as seen from alternative disciplines such as American studies, cultural geography, Native American studies, etc., as well as international examples of any of the topics above. Conference info and submission guidelines: *www.historicroads.org*.

The National Preservation Institute offers a wide range of workshops on historic preservation and cultural resources

(continued on page 19)

# SITES & STRUCTURES

**Carroll County Wabash & Erie Canal** in Delphi, Ind., is undertaking a new exhibit located along its section of restored canal. It will feature the reconstruction of an 1850s lime kiln, along with an operational gin pole that would have been used in stoking fuel and stone into the kiln and moving barrels to the dock.—*Canal Center Update* (Oct. 8, 2009)

The **Pamplin Pipe Factory** is located 10 miles east of Appomattox, Va. Tobacco-pipe making was likely underway at Pamplin by the 1740s, shortly after the first settlers arrived, and it developed into a cottage industry. The pipes were formed primarily by local women from the nearby deposits of red clay, fired in backyard wood-burning ovens, and packed for shipment in barrels and crates lined with pine needles or sawdust. Pamplin's cottage industry paved the way for the establishment of a factory sometime before 1880 by E. H. Merrill, an Akron, Ohio, company that was

the leading producer of tobacco pipes in America. The Merrills invented a pipe-making machine, and it is believed that eight to ten of these machines were utilized at Pamplin. The site is threatened by possible commercial development, but the Archaeological Conservancy has an option to buy the site for \$77,500 and is soliciting contributions. Info: The Archaeological Conservancy, Attn: Pamplin Pipe Factory, 5301 Central Ave. NE, Ste. 902, Albuquerque, NM 87108.

For the first time in more than 50 years, the 1882 stationary steam engine is running at the **East Broad Top Railroad's** Rockhill Furnace (Pa.) shop complex. The volunteers who restored the engine are using compressed air rather than steam to turn the engine, its 8-ft. flywheel, and the linked shaft-and-belt power distribution system.—*Friends of the East Broad Top Restoration News* (Oct. 2009)

# **NOTES & QUERIES**

Hagley Museum & Library (Wilmington, Del.—SIA Annual Conference 1977; Fall Tour 2004) has recently added postcards of railroad stations to its online collection. This collection includes over one thousand color postcards of railroad stations in the U.S. and Canada and covers the period from 1902 to 1972. Forty-nine of the fifty states are represented (Hawaii is the lone exclusion). These images will be of wide interest to railroad enthusiasts, as well as to architectural historians and scholars. View the collection at http://digital.hagley.org.

Hagley also reports that it has received a collection of photographs, scrapbooks, publications, and memorabilia from GM's Boxwood Road Assembly Plant (near Newport, Del.), which closed in July 2009. GM purchased the 142acre site and began construction of the plant in 1945; it produced the first cars, Pontiacs, in 1947, and by 1955 was assembling sixty cars per hour. Although originally built as a B-O-P (Buick-Oldsmobile-Pontiac) plant, the company added Chevrolets to its roster in 1964. From 1975 to 1984, the Chevrolet Chevette was the main model produced at the facility. Thereafter, GM retooled the Boxwood plant several times, producing at various points Chevrolet Impalas, Caprices, Barettas, and Malibus, then moving to Saturn production in 1999. The last cars made there were the Pontiac Solstice and the Saturn Sky. The collection contains several scrapbooks of photographs, news clippings, and miscellaneous items about production, employee activities, and the facility. There is a movie of the 1945 groundbreaking and an extensive album on the formal opening of the plant in 1947, as well as a number of color snapshots of plant events. There are also some advertisements for various GM automobiles and booklets that were given to plant visitors describing the operations.—*Hagley Library & Archives News* (Oct. 16, 2009)

The American Precision Museum (Windsor, Vt.) has been undertaking a study of its waterpower system under the direction of Christopher Marston and John Johnson [both SIA]. The APM is located in the former Robbins & Lawrence Armory, built in 1846. Based on an analysis of the wheel pit and surviving timber gearing frame, Marston and Johnson have been able to determine the size of the original wheel as 18-ft. diameter and 14-ft. wide. In September, the APM featured a historic talk on waterpower and the findings of the study, which is partially supported by a SIA Historic Preservation Grant.—*Rutland Herald* (*Sept.* 26, 2009)

The Theodore Burr Covered Bridge Resource Center. The Oxford (N.Y.) Memorial Library is undertaking a fundraising campaign to establish a resource center devoted to covered bridge history. The library is a fitting location for such a center since it is in a Federal-style house built in 1809-11 by master bridge builder Theodore Burr. It is the only remaining structure built by Burr. The library has recently finished a capital campaign to restore the house. It is now embarking on a project to install the shelving and display units to house its covered-bridge history collection, which includes photographs, postcards, slides, and model bridges. For info or to make a donation: Oxford Memorial Library, 8 Fort Hill Park, Oxford, NY 13830; (607) 843-6146. ■

# IA ON THE WEB

Adventures in Preservation (*www.adventuresinpreservation*. *org*), formerly Heritage Conservation Network, sponsors volunteer vacations in the form of building conservation workshops to preserve historic sites around the world.

**Butte** (*www.pbs.org/independentlens/butte-america/film.html*). The PBS series Independent Lens recently aired a documentary film on the history of Butte, Mont., and Anaconda Copper. The film focuses on labor relations and working conditions. Several 4-5 min. clips of archival footage can be viewed on the website.

**David Rumsey Map Collection** (*www.davidrumsey.com*). More than 20,000 maps, mostly of 18th- and 19th-c. North America and South America. Includes some with IA-related themes and images.

Horse-Drawn Firefighting Equipment. Images and info available on three websites:

Hall of Flame (www.hallofflame.org/handhorsedrawn2. htm). Features photos and descriptions of the extensive collection at the firefighting museum in Phoenix, Ariz.

Los Angeles Fire Department (*www.lafire.com*) has information on the history of the department, including its horse-drawn equipment (1880s-1920s).

**Canadian Fire Fighters Museum** (*www.firemuseumcan-ada.com*) offers coverage of the horse-drawn era plus an overview of the museum and collections at Port Hope, Ont.

Mt. Beacon Inclined Railway Restoration Society (www. inclinerailway.org). History of the funicular that operated

#### **CONFERENCES & WORKSHOPS**

(continued from page 17)

management. Seminars focus on enhancing the skills of professionals responsible for preservation, protection, and interpretation of historic sites. Courses are offered at locations throughout the U.S. and can be customized for specific organizational needs. Info: www.npi.org.

The Hagley Museum & Library (Wilmington, Del.) offers its Research Seminar Series on Thursday evenings at 6 p.m. in the Copeland Room. Feb. 11, Melanie Gustafson, Beautiful Faces, Strong Bodies: Harriet Hubbard Ayer and the Business of Beauty Culture in Gilded Age America; Mar. 11, Thomas Zeller, Consuming Landscapes: The View from the Road in the United States and Germany, 1920-70; Apr. 15, Jonathan Rees, Inventing the Cold Chain: Technology and Marketing in the Nineteenth-Century American Natural Ice Industry. Info: Carol Lockman, clockman@hagley.org; (302) 658-2400, ext. 243. near Beacon, N.Y., from 1902 to 1978. A local group is attempting to restore operations. Also *www.catskillarchive. com/rrextra/otiselev.html* for a reprint of an 1892 article in *Engineering News* about the 7,000-ft.-long cable railway that operated in New York's Catskills.

**Parks Canada Archeology Reports** (*www.sha.org/research\_resources/parks\_canada.cfm*). The Society for Historical Archaeology has placed on its website a large number of Parks Canada reports. These cover a broad spectrum of topics: the Corps of Royal Engineers building technology; an 18th-c. furtrade blacksmith shop; British smooth-bore artillery; historic lighting devices; bottle glass (British army and English manufacture); British military buttons; 18th-c. French shipwreck artifacts; and historical weights and measures.

**SIA on Wikipedia** (http://en.wikipedia.org/wiki/Society\_for\_ Industrial\_Archeology). Thanks to Justin Spivey [SIA] there is now an entry for our organization. Wikipedia is the "free encyclopedia that anyone can edit." SIA members are encouraged to contribute to this and other related articles.

"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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#### **ELUSIVE TRUSS BRIDGES** (continued from page 7)

lower cost of sloped ends, a number of vertical-end through lattice trusses were built.

Suspension trusses. Additionally, there is a group of trusses generally known as suspension trusses. The earlier designs, such as the Bollman (1852), Fink (1854), and Kellogg (1870), were built with vertical end-posts, while Thacher (1881) and Stearns (1890) were built with sloping end-members. All of these configurations share one common feature: a series of diagonal tensile members extending from the ends of the top chord to various points along the bottom chord of the truss. These configurations are no longer built as, while they tended to save material, they were prone to vibrations induced by moving loads.

*Conclusion.* Although we will never know with certainty, it seems that as scientifically based understanding grew regarding how the stresses in a truss were distributed, engineers became comfortable with dropping the vestiges of early timber bridges with their vertical ends. Competition amongst builders required the least expensive solutions, and that usually meant designs that used the least material. Thus, in most instances, the construction of slope-end truss bridges superceded vertical-end variations. However, some vertical-end bridge trusses continued to be built for a variety of special reasons: custom, availability of standardized prefabricated panels, usefulness as a protecting buffer for more critical members, and a desire for a sense of monumentality.

David Guise

#### SOCIETY FOR INDUSTRIAL ARCHEOLOGY

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## **CHAPTER NEWS**

**Oliver Evans** (Greater Philadelphia) held its annual meeting and picnic at the Woodlands Mansion & Cemetery in Philadelphia on Sept. 11. The cemetery features burial monuments to many great Philadelphia industrialists.

**Roebling** (Greater N.Y.-N.J.) held its annual corn roast on Sept. 26 at Croton-on-Hudson, N.Y. Participants hiked to the Bull Hill Quarry, and host Gerry Weinstein exhibited his steam engine collection. The Annual Drew Symposium was held on Nov. 7 with a full slate of presentations on the IA of Greater N.Y.-N.J. Prior to the well-attended symposium, members were invited to the Nohra Haime Gallery in Manhattan for a reception to view the work of Italian artist Andrea Chiesi, who paints abandoned industrial structures and landscapes. On Nov. 14, the chapter sponsored a threehour cruise of the Kill Van Kull, Newark Bay, and Shooter's Island aboard a New York Water Taxi.

**Southern New England** (*www.snecsia.org*) toured the Fletcher Granite Co. quarry in Westford, Mass., on Sept. 17. Fletcher is a major U.S. producer of dimension stone and granite curbing and has been in operation for more than a century (*www.fletchergranite.com*).

**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).

# CALENDAR

## 2010

Jan. 6-9: Society for Historical Archaeology Annual Conference, Amelia Island, Fla. Paper sessions and tours on the theme "Integrating Terrestrial and Underwater Archaeology." Info: www.sha.org/about/conference/2010.cfm.

Mar. 8-10: Historic Bridge Preservation Workshop: Historic Iron and Steel Bridges and Other Metal Structures, Lansing, Mich. Info: www.historicbridgerestoration.com.

Mar. 25-27: Business History Conference Annual Meeting, Athens, Ga. Info: clockman@hagley.org.

Mar. 31-Apr. 3: National Popular Culture & American Culture Association Conference, St. Louis, Mo. Paper sessions and some tours of IA interest (industrial design and architecture). Info: www.pcaaca.org/conference/national.php.

Apr. 21-25: Society of Architectural Historians Annual Conference, Chicago, Ill. Info: www.sah.org.

May 19-22: Vernacular Architecture Forum Annual Meeting, Washington, D.C. Info: www.vafweb.org.

May 20-22: Construction History Society of America Meeting, University of Pennsylvania, Philadelphia, Pa. Papers requested, see article in this issue. Info: chs@coa.gatech.edu.

June 3-6: SIA ANNUAL CONFERENCE, COLORADO SPRINGS, COLO. Paper proposals requested. See article in this issue. Info: www.sia-web.org.

June 16-19: Railroad Station Historical Society Annual Convention, Various Locations in Central & Western Carolinas. Info: www.rrshs.org.

June 21-26: National Railway Historical Society Annual Convention, Scranton, Pa. Info: www.endlessmountainrails.com.

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. See article in this issue. Info: www.historicroads.org.