

**2007 SIA FALL TOUR REVIEW—ELY, NV** 

lmost 100 SIA Members and friends journeyed to Ely for the 2007 Fall Tour. Ely is quite remote; a T-shirt in a local shop said "Ely – 200 Miles to the nearest Wal-Mart"! The tour was organized by the Nevada Northern Railway (NNRY) with the theme "Booms, Busts, and Rebirth."

Though founded earlier, the town of Ely started to grow when new methods for extracting copper from low-grade ore were developed in the early 20th century. Just outside of town there is an extensive deposit, which has been actively mined for over 100 years. In 1905, construction began on a railroad to move ore to a smelter being constructed at McGill, about 15 miles from the mines, and to bring in supplies and equipment from a junction with the Central Pacific at the new town of Cobre (copper in Spanish), approximately 115 miles from Ely. NNRY also transported blister copper from the smelter for further electrolytic refining in the East via the Central Pacific interchange. As the mines grew, so did traffic on the railroad; as many as thirty ore trains per day moved between the mines and the smelter. NNRY supported passenger traffic until 1941, when highway improvements favored buses instead. The remote location meant that NNRY had to be fairly self-sufficient with respect to maintenance and repair of the rolling stock, so an extensive collection of specialized shops was developed in the East Ely yard.

A worldwide decline in the price of copper, along with environmental restrictions on the smelter, led to a decision by Kennecott Copper to close the Ely operations, including the NNRY, in 1978. A group of local citizens thought that there might be some possibility of operating a tourist railroad, and after various negotiations, false starts, and lots of hard work, today's NNRY was born. As noted in the 2006 press release from the U.S. Department of the Interior announcing the designation of the NNRY as a National Historic Landmark, "Nevada Northern. . . is the best-preserved, least altered, and most complete main yard complex remaining from the steam railroad era."

Although events didn't get underway until Thursday, some SIA members came in early and enjoyed various attractions in Las Vegas and along the way to Ely. It was a pleasant surprise to run into many of them when we got to

(continued on page 2)



## In This Issue:

- Industrial Museums—New **Formulas**
- SIA Preservation Grant Assists Research on Millville's Past
- Electro-Pneumatic Block Signal System
- 2008 SIA Conference Preview—San José
- Call for Nominations of **SIA Officers**

Steaming-up the NNRY wrecking crane.

### FALL TOUR REVIEW (continued from page 1)

the historic Hotel Nevada Wednesday evening. When it was built in 1929, the six-story hotel was the tallest building in Nevada! It was a popular stop for celebrities going from Hollywood to Sun Valley, Idaho.

We met Andrea Westland, the local event manager, on Thursday to help get everything ready for registration. She'd joined the project recently, and was instrumental in putting together a very well planned event. After things settled down at registration, a small group went out to the **Ward Charcoal Ovens State Historic Park**. There we met Nate Thomas, a Forest Service archeologist, who'd written about the ovens as part of his master's thesis. The Ward mining district was a silver boom-town. When the San Francisco firm of Martin White Co. acquired the mine, they built six beehive ovens to produce charcoal as fuel and as the reducing agent in the smelting process. Alas, the ore body wasn't very deep and was played out shortly after the ovens were completed. Nate estimated that they operated about two years. They were exceptionally well constructed and were

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. 36, 4 (Fall 2007), Dec. 2007. 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*.



Hamilton "boneyard."

used for shelter and storage until acquired by the state. As Ward went bust, many of the residents moved across the valley to the Taylor district for the next boom-bust cycle.

After a quick visit to the **White Pine Museum**, we went over to the **Postal Palace**, a WPA-built post office that is now an event center for the Hotel Nevada, for dinner and a slide show by Fred Frampton, State Archeologist for the Forest Service, on the White Pine mining district, the site of Friday's tour.

Friday was a crystal clear day, allowing us to appreciate the vistas along the forty mile journey to the starting point for touring the **White Pine mining district**. This was the site of numerous silver mines, including the spectacular Treasure Hill strike. Our group began at the **Belmont Mill**.



Deep Ruby Mine headframe.



SIA Fall Tour group photo, Ely, NV.

This was a crushing and concentration mill that is in remarkable condition, despite being abandoned in the 1930s. Ore came from a mine up the hill, and was transported by an aerial tramway. From the small size of the tailings dump, the mine must have played out pretty quickly. Nate Thomas and Sean Pitts, from the East Ely Railroad Museum, a Nevada State Park, described the operation of the mill and accompanied us throughout the day.

The very rapid growth and equally rapid decline of these silver boom towns was exceptionally well illustrated at our next stop, the ghost town **Hamilton**. When silver was discovered here in 1868, the population of the area was about eight. The newly opened transcontinental railroad was only about 115 miles north, so people from all over the U.S. could get to Hamilton, and over 10,000 of them did by 1869. Alas, though exceptionally rich, the lode on Treasure Hill wasn't very big and didn't lead to a massive ore body like that of the Comstock Lode on the other side of the state, so by late 1873 only about 500 people remained in Hamilton. After a fire wiped out many of the buildings, the White Pine County seat moved to Ely. There's still a bit of contemporary mining going on in Hamilton, and there was a marvelous "boneyard" of mill equipment.

After lunch, Mark Bassett, the NNRY Executive

Director, and Andrea had a special treat for us. Through the generous support of the White Pine Four Wheelers, we were able to get to **Treasure City** and some of the other ghost towns accessible only by 4WD vehicles. Carved into the steep side of Treasure Hill, buildings typically had one or more floors difference in elevation between the streets running along the hill. Forest Service geologist Donna Fredrick came along and answered some of our questions about the geology and minerals of the area. She had also written much of the SIA tour guidebook. Our final stop was the ruins of an unnamed stamp mill. Until newer technology (notably ball mills) supplanted them, these cam-driven stamps pounded ore into the fine powder that the flotation process requires. The resulting concentrate can then be smelted with charcoal or other reducing agents.

After washing off the dust, it was time for a ride on the Ghost Train for dinner. Steam locomotive 40 was on point, and provided a wonderful opportunity for photographs in the dusk. We'd overwhelmed the capacity for a sit-down dinner, so were treated to food inspired by the diverse ethnic communities that were drawn to the mines: calzones, gyros, and pasties. The ride took us out to the Robinson mine area, about 10 miles from the East Ely yard, and back.

We awoke on Saturday to see it snowing! It was just a light

(continued on page 5)



Belmont Mill.

# We're Looking for Conference & Tour Locations!

Bode Morin is the new SIA tours and conferences coordinator and will be looking at old favorite and new locations for upcoming fall tours, study tours, and conferences. While it may seem daunting, hosting tours and conferences has gotten much easier in the last few years as SIA headquarters has taken over the burden of printing and mailing brochures, collecting registration fees, maintaining participant lists, and printing tour materials such as name tags and guidebooks. Hosting an event is a great way to showcase your area, start or reinvigorate a local chapter, or draw attention to important and threat-ened industrial heritage. If you are interested in bringing the SIA to your area or have ideas for study tours, drop Bode a line: (906) 369-1306; *siaevents@mtu.edu*. ■

# Millville Historic & Archeological District SIA Preservation Grant Update

The sources discovered when using a broad approach to historic research can yield an unexpected wealth of data. Such was the experience after undertaking what appeared to be a straightforward boundary expansion of the Millville Historic & Archeological District (NR) in Montague Twp., NJ. At the onset of the project, I was confident that the expansion to include the 19th-century upper dam and ruinous, saw and grist mills in its vicinity would easily tie in with the existing research. SIA's Phase I grant to the Montague Assn. for Restoration of Community History (MARCH) covered the costs of the preliminary research and consultation with archeologists Richard Veit [SIA] and Dennis Bertland.

As previously related in *SIAN* (Spring 2006), a deed for the mill mentioned hiring Solon Chapin of Easton, PA as contractor for the upper dam in 1862. A persistent question was, "Why was one of the region's prominent 19th-century bridge builders hired to construct a dam in a hidden ravine in a now easily overlooked area of our township?" Following up on a hunch, I was led to an 1880s newspaper clipping describing the history of Montague-Milford Bridge. It was there that the connection became clear. In 1841, Chapin had constructed a replacement to the ice-freshetdamaged Delaware River bridge at Montague. This had likely acquainted him with the prime industrial players in Millville—21 years in advance of the dam's construction.

One of these key players was Isaac Bonnell, a millwright and president of the bridge company in 1856. He is credited with having built over one hundred saw mills in the lumbering regions of New York and Pennsylvania. Bonnell's background had also taken him to Easton in 1832 to construct a large mill. The frame had been fabricated in Montague and floated the sixty miles to Easton on a raft.

The Bonnell connection also yielded another unexpected surprise and a connection with the SIA—Bonnell had expanded into limestone quarrying by 1868. There were extensive deposits of marl on his Millville property, and Bonnell was credited with using it as fertilizer with good results. This industry had been researched by one of SIA's founders, Ed Rutsch (1936-2003). Ed's parents resided in Montague and were long-time



Millville grist and sawmill, date of photo unknown.

members and benefactors of our historical society. Ed had even delivered a talk at the SIA's 1st Annual Conference at Cooper Union in 1972 on the topic of "Wood-Burning Lime Kilns in the Clove Valley, Montague, NJ." An abstract from that talk reads: "Farmers along the Clove Valley ... exploited a limestone ridge during the 19th century via woodburning lime kilns of a single-batch type. These kilns are located away from the quarries across a wet meadow to be near their fuel source. Marginal farmers sup-



Alicia B

Mill wall, Millville, NJ.

plied this fuel and day laborers operated the kilns."

Pat Condell [SIA], Ed's partner, shared his notes and also went with me to verify whether a large disrupted stone pile near Millville had any relation to the lime-burning industry. It sat a few miles from the more widely known quarry areas and from the locations Ed had identified. She concurred that it had been a large kiln, though proof as to who may have run it eluded us.

The second phase of the SIA grant included solidifying our research on the role of Millville's industry, further establishing and substantiating the actual expanded boundary. My colleague and assistant, Jack E. Decker, a licensed surveyor, created the project's district map. As Phase 2 drew to a close, his untimely death delayed compilation of the narrative and finalization of the map. SIA was most gracious in understanding and supporting my continued efforts. The full research package has now been completed and turned over for acceptance by the NJ State Historic Preservation Office in Feb. 2008.

Alicia Batko

## **SIA Preservation Grants**

The SIA awards grants of up to \$3,000 to support projects that document or preserve our industrial heritage. Info: www.siahq.org/ grants/ about.html. Deadline for Applications: March 31.

4

MARCH

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

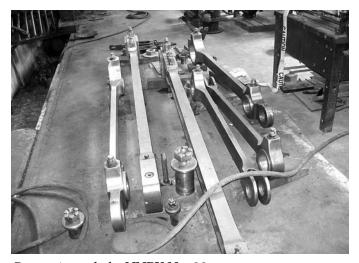
dusting that didn't stick in Ely, but it coated the surrounding hills in white. As the storm passed over, the bright sun created a lovely scene for our tour of the East Elv vard. Mark Bassett called the tour the "death march." In the three hours of touring, we got a very good overview. A personal favorite is the vault, which holds all of the documents generated by the railroad since its inception. Mark claims that somewhere in this large room is the very first check ever written by the railroad. They don't have the resources to even begin to process this treasure trove of industrial and financial history. At least it's in a safe, dry place, with some effort devoted to using acid-free boxes, etc., to help preserve it for future use. Another favorite was seeing steam locomotive 93 under repair for driver bearing problems. Because everything is hidden behind the wheels, it's not often that one can see how complex the suspension system of a steam locomotive is. There were so many fascinating things, it's impossible to even list them. Guess you'll have to go to Ely yourself!

After lunch our group went out to the **Robinson Nevada** Mining Co., now operated by Quadra Mining Ltd. Reopened in 2004, just in time to catch the surge in copper prices, the operation consists of a large open-pit copper mine, extracting ore that is only 0.6% copper, then milling and concentrating it to produce a fine powder that is approximately 25% copper. The concentrate is trucked to the Union Pacific at a site near Wendover, Utah. Unit trains carry it from there to ships bound for China, where it is smelted and refined. The mine produces over 120 million lbs. of copper and over 75,000 ounces of gold yearly. Given the low percentage of copper in the ore, they move a lot of rock. The dump trucks carry as much as 240 tons of rock per load, just three scoops from the giant shovels. We missed a blast breaking up some ore, but could see the smoke and dust from it. We ended the mine tour with a visit to the **Deep** Ruth Shaft head frame, a remnant from the days before the open-pit mines. It is slated for demolition as the open-pit mine reaches the area. Environmental Manager Sally McLeod expressed regret at this, but the structure can not be easily dismantled and no one is interested in taking it.

Early risers on Sunday got the chance to see the folks at NNRY steam up their wrecking crane. After it was pulled out of the engine house by No. 40, a few members even got the chance to operate it!

Though there were a few glitches (it wouldn't be an SIA Tour without a bus problem or two), this was an excellent tour to a fascinating site. There are far too many people who helped make it such a success to thank individually here, but a special thank you goes to Mark Bassett for seeking out the SIA, proposing the tour, and making it a reality, and to Andrea Westland for helping to organize and execute the tour.

Jay McCauley



Connecting rods for NNRY No. 93.



Ward charcoal ovens.



NNRY No. 40 and the "Ghost Train" crew.

# The Electro-Pneumatic Block Signal System, Part 1 The Railroad Gazette 1887-1891

The University of Vermont's historic preservation program offers a course taught by Robert McCullough [SIA] that requires students to examine old technical journals. The students select a topic, and then evaluate how the journals covered it over time. The block signal article by graduate Sarah Graulty was an outgrowth of that exercise; besides offering a clear and insightful analysis it illustrates a teaching method for developing an appreciation for the material culture of American industrialization and the use of primary sources. This is the first of a two-part article. Part 2, 1921-23 will appear in the next issue.

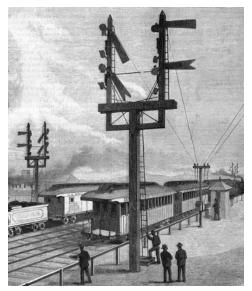
Articles published in *The Railroad Gazette* between 1887 and 1891 testify to significant changes taking place in American rail signaling. The ever-present desire for increased safety and efficiency drove engineers to perfect newer and better technologies. The automatic block system and, more specifically, the electro-pneumatic block signal system, represent an important step in the development of railroad technology in the late-19th-century U.S. Furthermore, the installation of mechanical apparatus associated with this innovative system introduced a new physical element to the American landscape: the pneumatic signal post.

To prevent collisions on shared tracks, railroads adopted a system of control that divided tracks into sections known as "blocks." This safety convention, known as the "block system," was designed to prevent multiple trains from occupying any one section of track at a time, thereby reducing the risk of collisions. Block sizes typically ranged from 1,000 ft. to three miles, but in order to be maximally efficient, engineers noted that the segments should not be longer than half a mile.

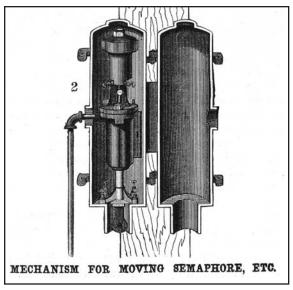
By 1890, there were two basic block systems: the simple and the automatic. The simple block was essentially a human-driven system. It provided regulations that compelled a station agent to exhibit a signal to hold all trains until he received an electrical communication indicating that the last preceding train was safely at the next station and out of the block in question. This was known as the "absolute block system" as opposed to "permissive blocking," in which the code of rules permitted a second train to enter a block before the first train had exited, providing it proceeded slowly and with great caution.

The automatic block system represented a great advance in railroad security because it did not require an attendant to control signals and direct trains between blocks and thus removed the possibility of human error. Railroadmen of the era concerned with train safety believed that, as stated in the April 5, 1890 issue of Scientific American, "A system which depends upon human vigilance can never be considered a perfect one." Instead, the automatic block system relied upon an electrical circuit to protect the trains in each block. The earliest form of the automatic signal was the Hall, introduced in Massachusetts and Connecticut circa 1871-1872. The Hall signal relayed communication from station to station via wire strung on poles. In the 1880s, the track-circuit system was introduced, which protected the blocks by means of a closed circuit within the track rails themselves. This system's success thus depended on the integrity of the track system: whether adjacent rails were connected properly to maintain the circuit.

*Electro-Pneumatic Track-Circuit Signals*. In 1890, the *Railroad Gazette* reported that "the latest form of pneumatic signal [was] a semaphore." The electro-pneumatic semaphore apparatus developed by George Westinghouse's Union Switch & Signal Co. was the most common of its type. Semaphore signal blades were arranged one above the other on a vertical post. The upper semaphore or "home signal" indicated the condition of the adjacent block, and the lower semaphore or "distant signal"



Semaphore signal apparatus. Scientific American (April 5, 1890), p. 209.



Cylinder showing internal mechanism. Scientific American (April 5, 1890), p. 216.

pertained to the next block down the line. If the upper semaphore arm projected horizontally from the post, it represented "danger" (or "caution"), signaling the presence of a train in the next block. Whenever the home signal stood at ninety degrees, the distant arm likewise moved to this position. Once the train in question passed out of the block, the home-signal semaphore arm fell, signifying "all clear" (or "safety"). The distant signal remained at a right angle until the train exited the adjacent block, indicating that the train was now more than two blocks away.

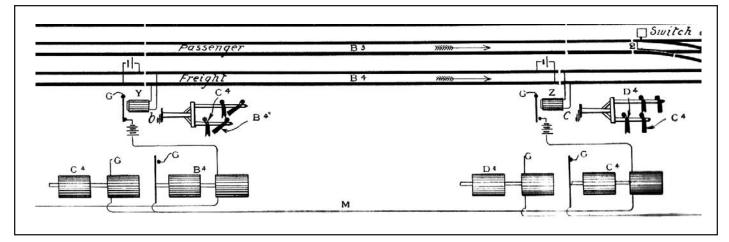
The semaphore apparatus was controlled by an electrical circuit within the railroad track. In the electro-pneumatic block system, the signal was installed exactly at the beginning of a block, and each block section operated on a unique circuit. Each block was electronically isolated from the next. At the exit from the block both rails were connected to a battery installed underground or in another location where it did not risk freezing, and at the entrance section the rails were joined by a simple relay in order to complete a circuit. The circuit remained closed provided the block was unoccupied by a train. As soon as a train entered the block, its metal wheels and axles shorted the electric circuit and, thus, triggered a change in the position of the semaphore arms to indicate "danger."

The semaphore arms alternated position by means of compressed air. The signals were counterweighted, so that when not acted upon by additional forces, the weight dropped and pulled the arm up into the "danger" position. Just below each signal was a pneumatic cylinder containing a piston connected to the semaphore arm. A valve at the top of the cylinder, which was opened by an electro-magnet and closed automatically by a spring mechanism, controlled the supply of compressed air to the cylinder. When the magnet was energized, the compressed air depressed the piston within the cylinder, causing the semaphore arm to lower into the "safe" position. As long as the current ran unimpeded through the track circuit, the electro-pneumatic semaphore remained in this state. Once a train passed into the block, the flow of electricity through the electro-magnet terminated immediately, the air to the cylinder was shut off, and the counterweight pulled the semaphore arm up to "danger," thus "failing safe." A similar system controlled the distant semaphore, but the electric impulses controlling its movement came through a wire mounted on poles running from the next adjacent block section down the line.

Automatic Clockwork Track Circuit Signals. It is important to note that although the electro-pneumatic block signal system was the newest and most advanced signal mechanism for train safety in the late 1880s and early 1890s, it was not the primary system. In 1890, the *Railroad Gazette* reported that "the most common form of automatic block signal

... is the Union Switch & Signal Union System," an automatic clockwork track-circuit signal system. The fundamental difference between this and the electro-pneumatic system was the motive power driving its signaling. The clockwork signal, like the electro-pneumatic semaphore signal, employed a battery and relay circuit. Here, however, the signal consisted of a disc fixed to a vertical spindle. With every opening and closing of the electric circuit, the disc was rotated 90 degrees by a system of clockwork and a weight suspended inside the iron signal post.

Electro-Pneumatic Block Signal System in the Landscape. The most prominent visual clue suggesting the possibility of an electro-pneumatic block signal system was the tall and striking semaphore apparatus, although semaphore signal arms were used in other signal systems as well. A semaphore signal consisted of a blade approximately 4-ft. long and 10in. wide, mounted on a post normally 24 to 30-ft. high on one side of the track or on a shorter post atop a bridge or other structure. The upper home signal had a square end and the lower, distant signal a fishtail shape. Customarily, the home signal was painted red and the distant signal green, but sometimes color details varied. At a meeting of the New England Railroad Club on December 11, 1889, a representative of Union Switch & Signal reported that "at least one large system in the West has adopted yellow as the standard color for all semaphores" because it allowed them to be seen more clearly from afar under adverse conditions. A semaphore signal's effectiveness was based on its arm position, not color. Because blocks were short and a signal (continued on page 12)



Arrangement of electrical circuits for the Union Switch & Signal's pneumatic automatic block signals. The Railroad Gazette (Sept. 6, 1889), p. 580. For track section B<sup>4</sup>, the local battery is at the far (right) end of the block. An electrical current travels back along the rails, through relay Y, and closes the circuit, thus compelling the electro-magnet in cylinder B<sup>4</sup> to engage its internal air valve and pull the semaphore arm B<sup>4</sup> on post b into the down position, indicating an empty block. The cylinders represented in the lower portion are enlargements of the cylinders on separate arms. The line M depicts a line wire used to carry the current from the distant signal in the adjacent block C to post b.

# Industrial Museums—New Formulas

Recent news about industrial museums in America, the division of the American Textile Museum into two (SIAN, Spring 2007) and the slow progress toward the National Museum of Industrial History (SIAN, Winter 2005), suggests that it might be worth looking at other models of how industrialization and its historic remains might be conserved and interpreted.

The National Museum of Science & Technology of Catalonia, known more snappily as the MNACTEC (tour site and host—2004 SIA Study Tour; *SIAN*, Spring-Summer 2004), explains the industrialization of this small corner of Spain, a region about the size of Vermont. Its organizational structure is that of a network museum, and with the recent addition of five new sites there are now twenty-five, almost all of them former industrial plants, mines, or factories.

The idea of a network came from the MNACTEC Director, Eusebi Casanelles, who took on the stalled project of a museum of technology as a young power station engineer in the early 1970s. After studying for a year at the University of Indiana in 1979, Casanelles managed to win the preservation of a remarkable Art Nouveau woolen mill in Terrassa, a textile town outside Barcelona. Within a few years, he had added an old paper mill to explain papermaking, a roundhouse and repair yard to interpret the history of railroads, a former coal mine, and various other sites, and the network started to acquire a critical mass.

The idea is that rather than to collect machines to tell the story of different industries and bring them together on one site, how much better to collect whole factories, mills, and mines, where the interpretation could be so much more vivid and authentic. Casanelles called his idea the MNACTEC "system," from which sprang the idea of a coordinated assembly of interdependent entities, like the solar or nervous system, all obeying a common set of rules. Each one explains one aspect of the industrialization of the region, and they are bound together by joint activities—education programs, marketing and corporate identity, a collections policy, conservation, and so on. Members share the cost of these programs, as well as various management and financial services. They also

# Letter to the Editor

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_

A European member of SIA writes: The Web site of the European Route of Industrial Heritage (ERIH) is rather more comprehensive and more potentially useful to SIA members than the note in your last issue suggests (IA on the Web, SIAN, Summer 2007). The ERIH organization began in North Rhine Westphalia, the Netherlands, and the United Kingdom and most of its current partners are drawn from those countries. It is gradually developing a network of Anchor Points, mostly major museums (e.g. the Museum of Science & Industry, Manchester), open most days of the year, with educational, library, retailing, and refreshment facilities. The network is slowly extending to other countries. ERIH also sponsors regional routes, which have their own Web sites, and for most there are also printed guides. The regional routes consist of places that can be promoted in a tourist sense (i.e. of interest to people other than enthusiasts for IA). Areas currently covered achieve much higher visibility as part of the MNACTEC than they could ever hope for as individual sites: visibility for government, for potential sponsors, for international agencies, for schools, as well as, of course, for visitors.

Casanelles introduced the system personally at the SIA's "Whither Industrial Archeology?" conference in Lowell in 1998, and the 2004 SIA Study Tour was centered on the museum system, then including about sixteen sites. Since then, in addition to those already mentioned, there are a lead mine, cotton and calico mills, a cement works, distillery, Catalan forge (inaugurated last year by the SIA's Patrick Martin; SIAN Summer 2006), flour mill, saw mill and tannery, all in original, working surroundings. Among the latest batch of new member sites are a hydroelectric station and salt pans. The fact that there is a waiting list of sixty more local museums and conserved sites suggests that it is a winning formula.

#### James Douet, MNACTEC Info: www.mnactec.com



The two tilt hammers and forge at the Farga Ripoll.

include the Ruhrgebiet, the Industrious East (of England), South Wales, and the region encompassing the Saarland, Lorraine, and Luxembourg. The ERIH Web site includes all anchor points and sites on regional routes but it consists principally of large numbers of key sites from all over Europe organized in ten thematic categories. All 27 countries of the EU are covered with the addition of Switzerland and Norway, and the Web site included descriptions of 622 industrial heritage sites as of Oct. 31. The Web site also includes 72 biographies, principally of such eminent figures as James Watt and August Thyssen, but also of some ordinary working people whose lives have international dimensions, and an essay on 'The Industrial Revolution in Europe' by SIA member Barrie Trinder. The formal organisation of ERIH is slowly developing and it should soon have a presence in many more countries, while the Web site continues to expand. Info: http://en.erih.net.



Vol. 36, No. 4

COMPILED BY Mary Habstritt, New York, NY; and Patrick Harshbarger, SIAN editor.

#### **GENERAL INTEREST**

- Mark Denny. Ingenium: Five Machines That Changed the World. Astragal (1-866-543-3045), 2007. 200 pp., illus. \$25. Ingenium is the medieval English vernacular for "an ingenious contrivance." Considers five such contrivances-the bow and arrow, the waterwheel, the counterpoise siege engine, the pendulum-clock anchor escapement, and the centrifugal governor. The history and physics behind each device, how it evolved, and how it continues to impact today's world.
- James Fallows. China Makes the World Takes. Atlantic Monthly (July/Aug. 2007). Fascinating analysis of China's industrialization, including the inner workings of the factory system and its connections with the outside world. From historical point of view, makes some thought-provoking comparisons between China's industrialization in the 21st century and America's in the 19th century.
- Courtney Gross and Gail Robinson. Crumbling Systems. Gotham Gazette (Aug. 13, 2007). www.gothamgazette.com. NY City's subway, road, steam, electrical, water, and sewer systems. Aging and underfunded.
- J. Myrick Howard. Buying Time for Heritage: How to Save an Endangered Historic Property. Univ. of NC Pr., 2007. 160 pp., illus. \$25. Preservation NC describes how it has used common real estate strategies to save more than 500 endangered historic properties from destruction. Offered as a model for other organizations.
- Industrial Soot Speeds Global Warming. Wall Street Journal (Aug. 9, 2007). Summarizes the findings of a research team that has measured and analyzed soot in arctic ice cores. Soot peaked in 1906-10 and remained high for several decades. Cores from before 1850 show most soot came from forest fires. Findings are helping scientists to refine models of global warming.
- James Nestor. The Art of Urban Exploration. San Francisco Chronicle Magazine (Aug. 19, 2007). Climbing around in mine shafts, nuclear missile silos, and abandoned sugar refineries. Urban explorers are becoming an increasingly organized "hobby" group that seeks out seldom-seen, and usually abandoned, industrial infrastructure.
- Christine Rider, ed. Encyclopedia of the Age of the Industrial Revolution, 1700-1920. 2 vols. Greenwood Press (Westport, CT), 2007. Avail: http://www.greenwood.com/catalog/GR3501.aspx. A fairly typical encyclopedia aimed at a general audience. Many of the entries are on economic and technological topics, but politics, social issues, and labor are also covered. Includes contributions by Robert Chidester [SIA].

- SHUT DOWN: Industrial Ruins in the East. Photos by Christoph Ling. Text by Susanne Schaber, Richard Swartz, and Serhij Zhadan. 164 pp., 104 photos. Album of abandoned and shutdown factories in 14 countries, mostly in Eastern Europe. Textile mills, chemical plants, oil refineries, mines, foundries, processing plants for sugar and fish, brickyards, and breweriesmelancholy witnesses to a bygone era. Each book is bound by hand and has a unique cover that is made from a coated, rusty metal plate with carton slipcase. Special SIA member price is \$65 ppd. until Jan. 15. Thereafter \$77. Avail: www.editionaufbruch.com. Info: christoph\_lingg@gmx.net.
- Peter H. Stott [SIA]. Looking for Work: The Industrial Archeology of Columbia County, New York. Syracuse Univ. Pr., 2007. 376 pp., illus. \$49.95. History of a Hudson River Valley county is told from the perspective of its economic and industrial landscape. Using 134 sites, links the evidence of industrial archeology into a series of compelling narratives. Avail: Columbia County Historical Society, (517) 758-9265; cchs@cchsny.org.
- TICCIH Bulletin (Summer 2007) includes a round-up of industrial heritage news items from around the world as well as an article by Marie-Noëlle Polino and Florence Hachez-Leroy, Why and for Whom Do We Teach Industrial Heritage; and a series of three articles on the practice of IA in Australia, Denmark, and the U.S., with Richard K. Anderson, Jr. [SIA] offering a viewpoint on private consulting. Quarterly with membership in TICCIH. Info: www.mnactec.com/ticcih.

## AGRICULTURE & FJOOD PROCESSING

- Rich Cohen. Sweet and Low: A Family Story. Farrar, Straus & Giroux, 2006. 272 pp., \$25. A disinherited grandson tells the story of the Sweet'N Low empire. Begun in a teabag factory outside the Brooklyn Navy Yard when the founder had the idea to put sugar into little bags, it was producing 50 million packets of artificial sweetener daily in 1996. Rev.: NY Times Book Review (Apr. 16, 2006).
- Louis A. Ferleger and John D. Metz. Goods, Chattels, Lands, and Tenements: Probate and the Pattern of Material Culture in Three Upland Georgia Counties, 1880-1910. Georgia Historical Quarterly, Vol. 90, 4 (Winter 2006), pp. 525-46. Exacting analysis of probate records shows that farmers of all wealth levels invested in tools and assets that could increase the productivity of their farms instead of purchasing consumer goods. These choices were every bit as complex and dynamic as choices being made by industrialists and urban residents.

- Dave Kenney. The Grain Merchants: An Illustrated History of the Minneapolis Grain Exchange. Afton Historical Society (Box 100, Afton, MN 55001; 1-800-436-9443; www.aftonpress.com), 2006. 216 pp., \$40. The Minneapolis Grain Exchange has endured for 125 years as a central market for buying and selling hard, red, spring wheat and other commodities, affecting the development of agriculture, flour milling, and transportation technologies like hopper cars, trucks, and barges. Rev.: Minnesota History (Spring 2007), pp. 202-3.
- John Soluri. Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States. Univ. of Tex. Pr., 2006. 321 pp. \$60. Growing, protecting, transporting, and marketing bananas, 1870-1970. The story of United Fruit and the continuing battle with plant pathogens. Rev.: T&C (Apr. 2007), pp. 427-9.
- Steve Striffler. Chicken: The Dangerous Transformation of America's Favorite Food. Yale Univ. Pr., 2005. 208 pp., illus.
   \$16. A critical look at the growth of the poultry industry.

# **IRON & STEEL**

- Bill Beck. A County Built on Iron: St. Louis County, Minnesota, 1856-2006. Donning Co. Publishers (Avail.: St. Louis County Historical Society, 506 W. Michigan Ave., Duluth, MN 55802; (218) 733-5786; www.thehistorypeople.org), 2006. 184 pp., illus. \$34.95. Chronicles the ups and downs of the region that included the finest natural harbor on the Great Lakes and the Mesabi and Vermilion iron ranges and how it contributed to America's industrial might.
- Christopher Dougherty. Archival Survey and Research Action Plan for Cornwall Iron Furnace. Pennsylvania Historical & Museum Commission, 2007. 32 pp. Electronic download available: www.comwallironfurnace.org. Cornwall is arguably the most complete extant charcoal furnace complex in North America. The survey outlines significant research questions and identifies archival resources that will be used to guide future research and interpretation on business practices and material culture of 18th- and 19th-century iron production.
- Chris Evans and Gören Rydén, eds. The Industrial Revolution in Iron: The Impact of British Coal Technology in Nineteenth-Century Europe. Ashgate, 2005. 210 pp., £50. Essays trace the fortunes of British iron and coal technology as it spread across Europe from Sweden to Russia, the Alps, and to Spain.
- Bill Plott. Tannehill Slave Quarters Unearthed. The Birmingham News (June 21, 2007). Avail.: Al.com. Interviews Jack Bergstresser [SIA], resident archeologist at Tannehill (tour site—1999 SIA Fall Tour), on recent uncovering of the quarters of slaves who probably constructed and worked at the furnace from 1858 to 1865.

## **T**EXTILES

Mark Chalkley. Hampden-Woodberry. Arcadia Publishing, 2006. Images of America series (not currently available from Arcadia, but may be found from other providers on-line). Another entry in this ubiquitous series of local photographic histories. Hampden-Woodberry was a cotton textile mill community in rural Baltimore County, MD, but was swallowed up by the city by 1890. The textile mills remained operating in the neighborhood until the early 1970s. In addition to local scenery and community photography, includes many images of the mills and machinery.

- Joe DePriest. Marking Gastonia's Darkest Day. *Charlotte* (*NC*) *Observer* (Sept. 16, 2007). Since 1986, some historians and citizens of Gastonia, NC, have worked to have a historic marker placed commemorating the 1929 strike that closed the largest textile center in the South and resulted in several deaths. For many years, the labor unrest that split the community was thought too controversial and the marker was blocked by local officials, but those concerns finally have been set aside and the marker erected.
- Jacqueline Field, Marjorie Senechal, and Madelyn Shaw. American Silk, 1830-1930: Entrepreneurs and Artifacts. Texas Tech Univ. Pr., 2007. Evolution of the American silk industry through case studies of Nonotuck Silk (Northampton, MA), Haskell Silk (Westbrook, ME), and Mallinson Silk (NY-PA). The mills specialized in different products, from sewingmachine twist and embroidery threads to mass-produced plain silks and high-fashion fabrics.
- Janet Greenlees. Female Labour Power: Women Workers' Influence on Business Practices in the British and American Cotton Industries, 1780-1860. Ashgate, 2007. 264 pp., illus. \$99.95. The cotton industry was the first large-scale factory system to emerge during the industrial revolution, and as such there were no set business practices for employers or workers to follow in the organization of the shop floor. This situation provided workers with an opportunity to influence decisions about work patterns and conditions of labor, and to set the precedent for industries that were to follow.
- Rise and Fall of Mill Life. *Past Times* (Aug. 26, 2007). Published as insert to the *Rome* (GA) *News-Tribune*. 100 pp., illus. Avail. (706) 290-5235; \$6 ppd. Explores in words and pictures how northwest Georgia's mill villages came to be, what they contained, what their way of life was like, and what has befallen them—from a local perspective. A second issue, slated for Aug. 2008, will deal with the history of the mills and textile companies themselves, their products, and labor-management relations.

#### **CONTRIBUTORS TO THIS ISSUE**

Richard K. Anderson, Jr., Sumter, SC; Alicia Batko, Montague, NJ; Charles Beatty, South Haven, MI; Kathleen Bratton, Concord, PA; Liz Campbell, Chichester, UK; Sandy Carter, Willamette Falls, OR; Robert Chidester, Ann Arbor, MI; Arlene Collins, Houghton, MI; Reese Davis, West Chester, PA; Dennis De Witt, Brookline, MA; James Douet, Terrassa, Spain; Patricia Duncan, Baton Rouge, LA; Don Durfee, Houghton, MI; Dennis Furbush, Jackson Heights, NY; Bill Gould, San Diego, CA; Sarah Graulty, Burlington, VT; Mary Habstritt, New York, NY; Neill Herring, Jesup, GA; Tom Hull, Coos Bay, OR; Christoph Lingg, Vienna, Austria; Christopher Marston, Silver Spring, MD; Jay McCauley, San Jose, CA: Don Mover, Pittsburgh, PA: Art Peterson, Greenville, NC; Dave Poirier, Hartford, CT; Lynn Rakos, Brooklyn, NY; J. Barrie Trinder, Rothwell, UK; Tyler Turpin, Richmond, VA; Alan Vanterpool, Edmonton, AB; Robert M. Vogel, Washington, DC; Suzanne Wray, New York, NY.

With Thanks.

# Tools

- Charles I. Beatty [SIA]. Untangling the Beattys—A Hundred Years of Edge Tool Makers. The Chronicle, Vol. 60, 2 (June 2007), pp. 49-67; continued in Vol. 60, 3 (Sept. 2007), pp. 99-111. History of family-run factories in southeastern Pennsylvania from 1806 to 1924. Author is not a member of the family, but has collected tools marked Beatty for over 40 years. Published by the Early American Industries Assn., www.eaiainfo.org.
- Kenneth L. Cope. American Milling Machine Builders, 1820-1920. Astragal (1-866-543-3045), 2007. 200 pp., illus. \$29.95. Identifies more than 300 builders of this important machine tool, characterized as an American development not copied from European precedents. First used by the firearms and sewing-machine industries, it proved to be much more productive than other machine tools and soon held a major place in all high-production American machine shops.
- A. D. Morrison-Low. Making Scientific Instruments in the Industrial Revolution. Ashgate, 2007. 432 pp., illus. \$99.95. Charts the growth of firms outside London and characterizes the instruments and tools they made from about 1700 to 1800. Makes the case that the making, selling, and distribution of scientific instruments were central to the British industrial revolution.

# AERONAUTICAL & AEROSPACE

- America in Space: NASA's First Fifty Years. Harry N. Abrams, 2007. 352 pp., illus. \$50. An extensive photographic record celebrates NASA's 50th anniversary.
- Phil Bellury and Randy Hasty. Georgia Flight: The History of Aviation in Georgia, 1907-2007. Georgia Aviation Hall of Fame (Box 8427, Warner Robins, GA 31095), 2007. 200 pp., illus. Handsomely produced book covers Georgia's contributions to aviation, including the first U.S. Marine pilot, first African-American military pilot, site of Lindbergh's first solo flight, the world's busiest airport, and the Gulfstream jet. Available with \$100 donation to the hall of fame.
- Peter J. Westwick. Into the Black: JPL and the American Space Program, 1976-2004. Yale Univ. Pr., 2006. 416 pp., illus. \$40. History of the Jet Propulsion Laboratory.
- Robert Wohl. The Spectacle of Flight: Aviation and the Western Imagination, 1920-1950. Yale Univ. Pr., 2005. 376 pp., illus. \$22. A cultural history of aviation, generously illustrated to show how flying has served to inspire artists and intellectuals.

### **B**RIDGES

- Covered Bridge Topics, Vol. 65, 3 (Summer 2007) includes Joseph D. Conwill, The Great Ithiel Town Patent Mystery (clearing up confusion caused by the original patents' loss in a fire at the Patent Office in 1836); Timber Trusses in New Zealand; The Old Springfield (MA) Toll Bridge (includes plans and photos); and Terry E. Miller, Notes on Chinese Covered Bridges: A Photographic Essay. Quarterly with membership in the National Society for the Preservation of Covered Bridges. \$15/yr.
- Michael Laris. After Inspection: Bridge Closed for Repairs. Washington Post (Aug. 31, 2007), Virginia Section, p. B3. Describes 125-yr.-old Aden Road Bridge in Nokesville. The National Register-listed metal-truss bridge was closed due to the need for urgent repairs. Owned by Norfolk-Southern RR, the state highway department and railroad are sparring over who is responsible for keeping it open to traffic.

- Elizabeth Mann, illus. by Alan Witschonke. The Brooklyn Bridge: The Story of the World's Most Famous Bridge and the Remarkable Family That Built It. Mikaya Press, 2006. 48 pp., illus. \$9.95. Part of the Wonders of the World series for children, this book is aimed at upper grade-school ages. It does not gloss over the dangerous working conditions or technical details.
- Vernon Mesler [SIA]. Restoration of Historic Metal Truss Bridges. Journal of Professional Issues in Engineering Education and Practice, Vol. 133, 4 (2007), pp. 270-74. Published by the American Society of Civil Engineers. Practical advice on riveting, heat straightening, and other techniques available for restoring truss bridges.
- Matthew Strother. Bridge Builder Left Legacy in Walls. LaGrange (GA) Daily News (July 7, 2007). Photo and story describe timber roof trusses in 110-yr.-old building in downtown LaGrange (corner of E. Lafayette Sq. and Lafayette Parkway). Built by John T. King, son of Horace King, a well-known covered bridge builder in the region, the trusses feature a superimposed segmental arch.
- John Noble Wilford. How the Inca Leapt Canyons. NY Times (May 8, 2007). MIT scientists and archeologists are conducting in-depth tests of Inca suspension bridges, including building a 60-ft.-long replica with 50 miles of twine.

### RAILROADS

- Donald G. Curry. **Restoring Locomotive 100**. *RMQ*, No. 44 (Summer 2007), pp. 10-14. Very detailed report on the restoration of a 1906 wood-steeplecab electric locomotive at Maine's Seashore Trolley Museum.
- Manny Fernandez. Longest, and Possibly Coolest, A Train Still a-Thrumming at 75. NY Times (Sept. 10, 2007). Celebrates the 75th anniversary of New York City subway's A line, which began operation on Sept. 10, 1932.
- Frederick B. Gates. The Impact of the Western & Atlantic Railroad on the Development of the Georgia Upcountry, 1840-1860. Georgia Historical Quarterly, Vol. 91, 2 (Summer 2007), pp 169-184. The W&A was a state-funded project with political support from areas outside the thinly settled former Cherokee Nation lands where the railroad was built. Agricultural production in the upcountry was predominantly devoted to grains prior to the railroad, after which it shifted to cotton.
- Underground Secrets: Inside New York's First and Most Ornate Subway Station, Closed Since 1945. Preservation Online (Aug. 31, 2007). www.preservationonline.org. The 102yr.-old City Hall Station is rarely open to the public, but the city is spending significant funds to maintain and restore it.

## **AUTOMOBILES & HIGHWAYS**

- Peter Applebome. Recipe for a Museum: 200 Fire Trucks and a Dream. NY Times (June 3, 2007). Andrew Leider has collected more than 200 vintage fire trucks over the past five years with plans to establish a museum in Walkill, NY.
- Chad Randl. The Preservation and Reuse of Historic Gas Stations. Preservation Brief 46. Heritage Preservation Services, National Park Service, 2006. Historical background; gas station types; maintenance, repair, and rehabilitation case studies.
- Don Sherman. How Ford Brought Power to the People. NY *Times* (July 29, 2007). History and celebration of Ford's Model 18 V-8 (The Little Deuce Coupe), which was introduced 75 years ago in 1932. Chronicles how the model went from a financial flop to a hot-rod icon.

- Charles Rumford Walker. American City: Rank and File History of Minneapolis. Univ. of Minnesota Pr., 2005. 278 pp., \$18.95. Re-issue of 1937 labor classic detailing the infamous Minneapolis truckers' strike of 1934. New introductory essay analyzes the strike's socioeconomic and political context and the struggle's aftermath.
- Michael Wallis. The Lincoln Highway: Coast to Coast from Times Square to the Golden Gate. W. W. Norton, 2007.
   Photographic travel journal captures local detail and culture along the route of the first trans-continental automobile tourist trail.

## WATER TRANSPORT & CANALS

- Robert J. Kapsch [SIA]. The Potomac Canal: George Washington and the Waterway West. W.Va. Univ. Pr. (1-866-WVUPress), 2007. 374 pp., illus. \$40. Active from 1785 until it was overtaken by the C&O Canal in 1828, the Potomac Canal was used to ship flour from mills in the foothills of Appalachia to the tidewater of the Chesapeake. It ranks as the new nation's first effort to link the rich western agricultural lands with the coastal port cities of the east. The Potomac Canal laid the foundation for the C&O Canal and the B&O RR.
- Christopher Maag. Tugboat Industry Is Experiencing a Revival. NY Times (June 23, 2007). Shipbuilders have more orders for new tugboats than they can fill. Interviews with longtime builders, including Foss Maritime in Rainier, OR (est. 1889) and Great Lakes Towing in Cleveland, OH (est. 1899).

#### **MISC.** INDUSTRIES

- ◆ James Barron. Piano: The Making of a Steinway Concert Grand. Henry Holt & Co., 2006. 280 pp. \$24. This collection of articles (which appeared in the NY *Times* between May 2003 and April 2004) follows one piano through the 11 months it takes to build it. The detailed journey is interspersed with company history. Rev.: NY *Times Book Review* (Oct. 1, 2006).
- Cassette Tapes Still Popular in Some Circles. Savannah (GA) Morning News (Aug. 5, 2007). Lenco-PMC (Waverly, NE) is the U.S.'s last remaining manufacturer of magnetic cassette tapes, making about 20 million cassettes last year compared to a high of 175 million in 1995. While CDs have replaced cassettes for music, they still remain popular for audio books for the blind, court recordings, and religious messages.
- Eric Jay Dolin. Leviathan: The History of Whaling in America. W. W. Norton, 2007. 479 pp., illus. \$27.95. This survey of the whaling industry's rich history has received an excellent review. Rev.: NY Times (June 20, 2007).

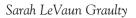
#### **ABBREVIATIONS:**

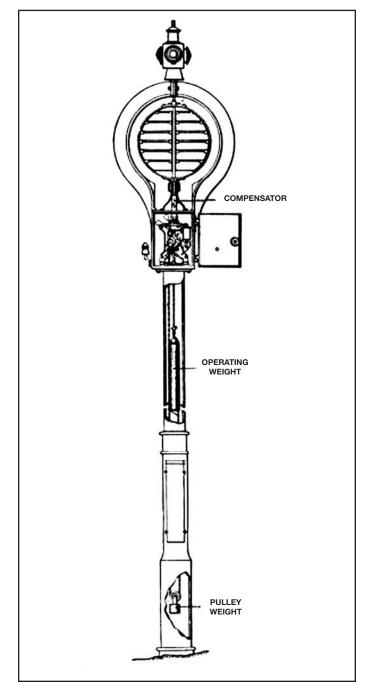
- RMQ = Railway Museum Quarterly, published by the Assn. of Ry. Museums (www.railwaymuseums.org)
- T&C= Technology & Culture, published by the Society for the<br/>History of Technology (SHOT)
- TICCIH = The International Committee for the Conservation of the Industrial Heritage

**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.

## **ELECTRO-PNEUMATIC** (continued from page 7)

apparatus had to be present at the beginning of each section, semaphore posts became common along railroad tracks that employed this type of signal system. However, in this era, the electro-pneumatic block signal system was quite young and its apparatus was far from ubiquitous. Between 1887 and 1891 the country's railroads displayed a broad range of signaling systems and devices, but the years that followed would see a move toward conformity that would embrace electro-pneumatic block signaling and continue to transform the American landscape.





Clockwork disc signal. The Railroad Signal Dictionary (1908), p. 64.

# "Change is the Constant" SIA Annual Conference • San José, May 29–June 1

hether it's the geological change that has shaped the entire Bay Area, or the constant pace of innovation and daring, nothing better describes the Bay Area and Silicon Valley than "Change is the Constant," the theme for the 2008 SIA Annual Conference. Change takes many forms: economic, environmental, technological, and social, all of which occur at an ever increasing pace here. The challenge for IA is how to capture this dynamic environment, and to utilize the forces of change to further the research and public outreach that are the core of the SIA mission. Come to San José, where Change is the Constant!

The Samuel Knight Chapter is helping to organize the event and tours are preliminarily planned for the New Almaden mercury mines and smelters, WWII-era military installations, shipyards, automotive plants, and early computer industry shrines, including the Hewlett-Packard garage and Shockley Semiconductor. The conference hotel will be the Sainte Claire in downtown San José. Watch the conference Web site for more details as plans evolve: *http://knightsia.org/sia2008*.

#### CALL FOR PAPERS!

The SIA invites proposals for papers and poster sessions to be presented at the Annual Conference on Sat., May 31. Poster sessions can be works in progress. Presentations on all topics related to industrial archeology, technology, social change related to industry, and bridges are welcome. Papers about industries in the Silicon Valley region are encouraged. All papers and poster sessions should offer interpretation and synthesis of data.

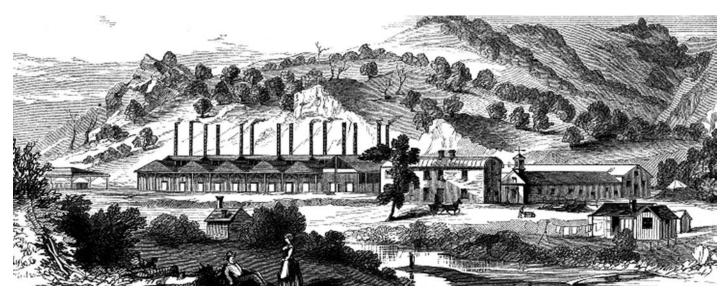
*Presentation Formats*: Proposals may be for individual papers 20-min. in length, or themed papers filling a 90-min. session,

or organized 90-min. panel discussions (formal commentator optional). Each proposal must include: 1) title; 2) a 300-500 word abstract with a detailed discussion of points, findings, or conclusions to be presented in hard copy and electronic format (Word or WordPerfect); 3) résumé for the presenter(s), including postal address, telephone/fax, and e-mail; 4) a list of visualaid requests. A panel organizer should submit all paper proposals as a group, accompanied by a title and a brief description of the theme or purpose. If any of these items is missing, the proposal will not be considered. Presenters are encouraged to consider transforming papers into an article for *IA: The Journal of the Society for Industrial Archeology*. No conference proceedings are published. Visit *http://www.knightsia.org/ sia2008/* for more information.

Deadline for paper proposals: February 29, 2008. Send copies to: Marco Meniketti, Program Chair, SIA 2008 Paper Sessions, Dept. of Anthropology, One Washington Sq., San José, CA 95192-0113. Paper sessions are planned for venues on the San José State campus.

#### 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 San José 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. 21, 2008. Info: Patrick Harshbarger, SIA Scholarships, 305 Rodman Rd., Wilmington, DE; (302) 764-7464; *phsianews@aol.com*. Notice of awards will be made by Apr. 15. ■



The New Almaden mine near San José was a major producer of quicksilver (mercury) from about 1845 to 1922. Shown here is the complex of buildings known as "The Works" that housed the furnaces for smelting the ore. From Harper's Monthly, Vol. 27 (June 1863).

# Historic Bridge News

8th Historic Bridges Conference. The conference will be held at the Blackwell Inn on the campus of Ohio State University, Columbus, Apr. 28-29, 2008. Intended to provide a forum for the exchange of ideas among engineers and preservationists, subjects of interest will include engineering concerns for safety, performance, repair, maintenance, and rehabilitation techniques, as well as historians' perspectives. Info: Hojjat Adeli, *adeli.1@osu.edu*.

In the past six months, Friends of Historic Northport (AL) have obtained permission from state and federal officials and secured a grant to relocate and preserve the 203-ft.-long **Black Warrior River Bridge**, a wrought-iron bowstring truss built in 1882 by the King Iron Bridge Co. of Cleveland (*SIAN*, Winter 2006). This is a significant milestone in the effort to save the bridge, which was abandoned in place on an unused farm lane about 30 years ago. The bridge will be relocated for use on a river walk in Northport. It is believed to be among the oldest and longest of its type in the U.S.—*Tuscaloosa News* (Sept. 27, 2007)

Residents of Topsham and Brunswick, Maine recently celebrated the reopening of the **Androscoggin River Swinging Bridge**. The wire-rope suspension footbridge was built in 1892 by John A. Roebling's Sons Co. Its primary purpose was to connect the French-Canadian neighborhood of Topsham Heights with the mills and businesses on the Brunswick side of the river. The restoration was a community effort with the Rotary, Kiwanis, Boy Scouts, and other civic groups raising funds to match a federal grant. The celebration included a ribbon cutting and speakers.—*Portland Press Herald* (*Sept. 20, 2007*) Efforts are underway to restore the **vertical-lift drawbridge over the C&O Canal** in Williamsport, MD (tour site— 2001 SIA Annual Conference, Washington, DC). The Western Maryland Ry. built the bridge in 1923 to provide access to the Potomac Edison power plant, but, curiously, the bridge reportedly lifted only once due to the decline of the canal. The National Park Service bought the bridge in 1991. Christopher H. Marston [SIA], architect with HAER, is assisting with the preparation of a report including measured drawings, photos, and historical information.—*Hagerstown Herald-Mail* (*Sept. 19, 2007*)

The Commonwealth of Pennsylvania has dedicated a historic marker to bridge engineer **Ralph Modjeski**. The marker celebrates Modjeski's Polish heritage and identifies him as a major force in 20th-century American bridge engineering. It is located near Modjeski's masterwork, the 1926 Benjamin Franklin Bridge (tour site—2007 SIA Annual Conference), at the corner of 6th and Race streets in Philadelphia.

The Union Pacific RR has announced it will not tear down the 105-yr.-old **Kate Shelly Bridge** over the Des Moines River near Boone, IA. The single-track, 2,685-ft.-long, steel girder bridge has become a bottleneck, but instead of tearing it down UP is building a parallel two-track bridge able to accommodate trains traveling at 70 mph. The old Kate Shelly Bridge will remain in place towering 190 ft. above the valley floor, although who will be responsible for its longterm maintenance remains unclear. The bridge's namesake is a 15-yr.-old girl who in 1881 made her way through a storm to warn a rail agent that a bridge prior to this one had washed out. The agent was able to stop an oncoming express train, thus saving numerous lives.

> The **Salem-Shotwell Covered Bridge** in Opelika, AL, re-opened in August at its new location in the town's park. *SIAN* (Fall 2005) reported that the bridge had collapsed during a flood and efforts to salvage it were uncertain. Ultimately, the town rallied around the idea of rebuilding the bridge with help from local civic groups. The timber Town lattice truss bridge was built in 1900.

> We all know that bridges vibrate under load, but ... musician Joseph Bertolozzi plays bridges. He recently played the **Mid-Hudson Bridge** near Poughkeepsie, NY. With mallet in hand as he climbed the suspension bridge's main cables, he achieved a wide variety of musical effects from the "woo-wooing" of the cables to a rain-stick-like sound from rust falling through the hollow steel towers. Bertolozzi records the sounds and then uses them to compose musical pieces—NY *Times (July 1, 2007)*



Kate Shelly Bridge near Boone, Iowa.

#### Keep Your Society Moving Forward

The annual Call for Nominations is your opportunity to help maintain the quality, strength, and diversity of leadership that has kept SIA growing for more than three decades. SIA counts on its members to organize activities that bring us together and produce publications that spread our message to others. The Society's role is always expanding, by introducing new programs such as the Industrial Heritage Preservation Grants, by creating ties to similar organizations throughout the world, and by reaching out to increase our membership. We expect our leadership to consider and reflect members' interests and goals in continuing to plan the future of SIA.

In 2008, five openings will occur on the Board of Directors and 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 you from self-nomination, please find someone to nominate you.)

Each candidate must be an SIA member in good standing and must consent to being considered for nomination. Candidates for President and Vice-President shall have served on the Board for a minimum of one year as a voting member. Candidates for Director must adhere to and sign the Society's Conflict of Interest Policy prior to the election. The SIA has established a policy concerning reimbursement for travel costs associated with Board meetings; it is available from any member of the Nominations Committee.

The deadline for nominations is Jan. 19, 2008. If you have any questions or need additional information, please don't hesitate to call or write to: Cydney E. Millstein, Chair, Nominations Committee, 1537 Belleview Ave., Kansas City, MO 64108; Phone/Fax: (816) 472-4154; Cydney@ahr-kc.com.

#### Positions Open in 2008:

**President** (2-year term). Chairs Board meetings, coordinates management of SIA funds and official activities (conferences, tours, and publications), liaisons with related professional societies, institutions, and organizations; sees that orders and resolutions of the Board are carried out. For two years after terms expires, serves as an ex-officio voting member of the Board and ex-officio member of the Nominations Committee.

Vice-President (2-year term; see below). Serves on the Board, chairs meetings, and carries out other official presidential functions in the president's absence. The vice-president traditionally is elected president at the end of his or her term in order to provide continuity of leadership. In effect this means a 6-year term: 2 years as VP; 2 years as President and 2 years as Past President.

**Directors** (3-year term). Three of seven directors on the Board of Directors, which meets three to four times per year, including during the annual conference. Directors govern official business of the SIA and chair committees that oversee operations, such as publications, tours and conferences, and local chapters.

Nominations Committee Member (3-year term). One of three elected members who oversee the annual nominations and elections. 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 Society by-laws on the Chapters screen of the Web site *www.siahq.org*. If you're unsure about the process or the obligation, please call or write at the address above.

#### SIA Officers and Directors

Robert Stewart, President (2006-08) David Starbuck, Vice President (2006-08) Chris Andreae, Past President (2006-08) Richard K. Anderson, Jr., Secretary (2006-09) Nanci K. Batchelor, Treasurer (2006-09) Diana Bouchard, Director (2007-2010) Betsy Fahlman, Director (2007-2010) Mark Finlay, Director (2006-09) Dennis Furbush, Director (2006-09) Jay McCauley, Director (2006-09) Jay McCauley, Director (2005-08) William McNiece, Director (2005-08) Kevin Pegram, Director (2005-08) Patrick E. Martin, Executive Secretary, Editor IA, and TICCIH Representative Patrick Harshbarger, Editor SIAN

#### Nominations Committee

Cydney Millstein, Chair (2005-08) Ed Grusheski (2006-09) Christopher Marston (2007-2010) Chris Andreae, *ex officio* (2006-08)

# SITES & STRUCTURES

Preservationists scored a partial victory in October when the NY City Landmark Preservation Commission placed portions of Brooklyn's **Domino Sugar Refinery** (tour site—SIA Annual Conference 2002) on the city's list of historic landmarks. Since ceasing operations in 2004, the 12-acre refinery complex has been sold to a developer who plans to build high-rise apartment buildings. Historic preservation groups, including the SIA's Roebling Chapter, have been working together to document and preserve the refinery. The landmark status means that the developer will be required to sympathetically incorporate three of the oldest refinery buildings in the new development, but other buildings, including the sugar bin with its sign and conveyor ways, were not included. The entire complex has been determined eligible for the National Register of Historic Places.

Grindstones Project. At the request of Willamette Falls Heritage Foundation, six historic pulping stones were donated by the West Linn Paper Co. to the City of West Linn, Oregon in May, to become the materials for an ambitious public art project near Willamette Falls. The stones, retrieved from the woods on mill property with a fork lift and a small flatbed truck, now rest at nearby Willamette Park, awaiting their eventual transformation into a massive monument to more than a century of paper-making. West Linn recently approved a small 'percent for arts' funding mechanism, which, combined with a \$2,250 grant for finalists' stipends from the county's cultural coalition, will help to launch a project planning committee. Sandy Carter, executive director of WFHF, says the final product of the Grindstones Project will be a fine-arts monument-complete with interpretive panels on pulp-making and pulping stone history-illustrating the dramatic scale and the deep legacy of West Linn's paper mill heritage to this now-upscale Willamette River city of 24,000. Carter aims for completion by 2009, in time for Oregon's 150th statehood anniversary.—Sandy Carter

The Fort Screven Preservation Organization was established earlier this year to work toward the long-term preservation and appreciation of the abandoned fort on Tybee Island, Georgia. Fort Screven (tour site—1999 SIA Annual Conference, Savannah) features an array of batteries and fortification structures dating from the late 1880s to the 1920s (SIAN, Fall 2006). It has been under pressure from resort development, including a recent proposal to build beachfront houses atop one of the reinforced-concrete batteries. The proposal caused members of the community to rally in a successful effort to persuade local officials to deny the building permit. Info: http://fortscrevenpreservation.org.

A developer is building a residential and commercial development on the site of the **J. A. Jones Co.** shipyard in Brunswick, Georgia. The shipyard is best known for building about 100 Liberty Ships during WWII. The developer is funding an oral history collection along with donated photos, shipwrights' tools, and other artifacts to be preserved at the A. W. Jones Heritage Center on St. Simons Island next to the lighthouse.—*Florida Times-Union* (Sept. 23, 2007)

A preservation battle is looming in Columbus, Georgia, over the **Bibb Company Mill**, one of five major textile complexes in the Riverfront National Historic Landmark District. A developer has proposed demolishing all but about 200,000 sq. ft. of the 650,000-sq.-ft. complex to make way for a hotel and restaurant surrounded by retail shops and residences. The developer would leave the original 1900 mill, but would demolish its 1916 and 1920s extensions, the weave shed, the warehouses, office building, commissary, railroad trestle, and waste tank. The Georgia Preservation Trust, National Trust for Historic Preservation, and Georgia Historic Preservation Division have all weighed in expressing concerns over the plan that might compromise the NHL's status. Local preservationists and



Volunteers salvage pulping stones from the West Linn (OR) Paper Co. for use in a proposed public arts project celebrating the city's paper mill heritage.



Bibb Company mill, Columbus, GA.

andy Carte:

officials have been more ambivalent, citing the mill's overwhelming size as a huge impediment to practical comprehensive preservation plans.

Underwater divers of the Great Lakes Shipwreck Historic Society have found the wreck of the *Cyprus*, an ore freighter that sank in Lake Superior on its maiden voyage in 1907. The 420-ft.-long ship went down about eight miles north of Deer Park on Michigan's Upper Peninsula under mysterious circumstances and with all but one of her 23 crew members. The shipwreck had not been charted because the lone survivor, who washed ashore on a raft, had become disoriented and reported the ship's position much closer to shore than it actually was—www.shipwreckmuseum.com/press.phtml.

The U.S. Maritime Administration is disposing of the **James River Reserve Fleet**, which at one time numbered more than 100 military vessels. USMA has removed at least 60 of the vessels, either sending them to the scrap yard or giving them to the Navy for target practice. Most of the vessels were from 30 to 60 years old, including the USS Gage, a troop transport that took part in the invasion of Okinawa

during WWII. In addition to the obvious costs of maintaining the fleet, the agency cites environmental concerns for contaminants entering the Chesapeake Bay ecosystem. There has been some interest in preserving a few of the ships, including the *Gage*, but preservationists missed an August 2007 deadline for submitting preservation plans.— *Preservation Online (Aug. 9, 2007)*.

Federal regulators are threatening to shutdown the **Delta Queen**, the 81-year-old paddle-wheeled, steam-driven riverboat that is a well-known historic icon plying the Mississippi River system. The controversy surrounds the 1966 Safety at Sea Act, which prohibits wooden boats from carrying more than 50 overnight passengers. The *Delta Queen* carries up to 174 passengers and although built in 1926 with a steel hull, it has a wooden superstructure. The riverboat has operated under a federal exemption since 1966, but regulators have indicated they will not renew it. Ambassadors International, which bought the boat last year, says that the real issue isn't safety, but that it forced employees of the Seafarers International Union off the boat, and that the union is using its political clout as a bargaining tool.—NY Times (Oct. 25, 2007)

# IA ON THE WEB

**Canals in Northern Ohio and beyond** (*www.clevelandmemory.org/SpecColl/annals/*). Abstracts of three Cleveland newspapers from 1819 to 1835 summarize articles about canals in the region and beyond, mostly covering construction progress or efforts to promote internal improvements. Abstracts were compiled in the 1930s by the WPA and are now being digitized. Canals is the first subject to be digitized with more planned.

National Insulator Association (*www.nia.org*). Primarily aimed at collectors of antique communication and electric-power insulators. A wealth of data on materials, makers, and uses.

**New Britain (CT) Industrial Museum** (*www.nbim.org*). Info and background on five major industrial artifact collections: Stanley (tools & hardware); Fafnir (bearings); Landers (appliances); American Hardware (locks); and North & Judd (fasteners).

Philadelphia Trolleys (*www.philleytrolley.org*). Maps, historical photos, and many interesting facts about the city's streetcar systems and efforts to preserve their features. Includes photos from the SIA's 2007 Annual Conference.

Smithsonian Studies in History & Technology (www.sil.si.edu/SmithsonianContributions/HistoryTechnology). Digitized series of reports by Smithsonian staff and colleagues from 1969 to 2002. They cover a wide range of topics, many based on detailed analysis of artifact collections or in preparation for exhibits. **Southern New England RRs** (*http://railroads.uconn.edu/ index.html*). UConn's RR History Archives' digitized photos of stations in CT, MA, and RI, and a list of useful links to other rail-related sites. The New Haven RR Digital Collection features 460 photos of trains, stations, and equipment with descriptions.

Tacoma Narrows Bridge (http://www.historylink.org/essays/ output.cfm?file\_id=8214). Dedication of the new twin bridge, and information on the history of the previous two suspension bridges—"Galloping Gertie" (opened and collapsed in a wind storm in 1940) and its replacement (1950), which will now carry one-way traffic.

**U.S. Lighthouse Society** (*http://uslhs.org*). Historical and contemporary resources to research and learn about the development, operation, and preservation of lighthouses. Featured is an amazingly detailed and annotated cross-section of the Marblehead Lighthouse on Lake Erie by graphic artist Rick Henkel.

WRDC, New Haven (www.wrdcobg.com/history.html). History of urban AM radio station includes descriptions of early technology and programming from the 1920s.

"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.

# **CHAPTER NEWS**

Oliver Evans (Greater Philadelphia) held its annual meeting at the Fairmount Water Works in September. Steve Loveless presented an illustrated talk on the history of the postwar Cunard Line fleet. Later in the month, the chapter toured Memorial Hall to view the scale model of the 1876 Centennial Exposition and the renovations being made to house a new children's museum. Members participated in Philadelphia's Archeology Month program in October with an information table at the Independence Living History Center Archaeology Lab in center city. The program included presentations on current projects, a film festival, and an open house at the lab.

**Roebling** (Greater NY-NJ) has had its usual full schedule of tours and events. Over the past six months or so, members have visited the McDonald-Klines sawmill (a rare 19thcentury survivor in central New Jersey, complete with reciprocating saw and William Bartley & Sons turbine); toured the East River waterfront of Brooklyn (giving members an overview of the area in which the chapter's preservation committee, chaired by Mary Habstritt, has been striving to see that industrial history is preserved); toured Schoen Trimming & Cord in Manhattan (producer of tassels and cords by hand and on century-old machines); explored Star Porcelain in Trenton (active from 1899 to 2003); and visited the Thomas A. Edison Memorial Tower & Menlo Park Museum in Edison, NJ. The chapter held its annual corn roast at Croton-on-Hudson, NY in September, which included a tour of the archeology of Croton Point (remnants of brick manufacture and viniculture). The chapter held its 27th Annual Drew Symposium on Oct. 27. The allday event featured a full slate of presentations on the region's IA happenings.

**Samuel Knight** (N. California) is busy making preparations for the 2008 national SIA Annual Conference, San Jose, May 29-June 2. Members are generously donating their time scouting out destinations and planning meals and events. The chapter held its annual meeting in September in the Leonia Heights district of Oakland. They hiked to the remains of the Leonia Heights open-pit mine, which produced iron pyrite that was turned into sulfuric acid at the Stege Works of Stauffer Chemical in Richmond.

Support Your Local Chapter. For info on a chapter near you or to start one, contact Jay McCauley, SIA Director, Local Chapter Chair (mccauley3@sbcglobal.net) or check out the local chapters section of the SIA Web site (www.sia-web-org)

# **CONFERENCES & WORKSHOPS**

Hagley Museum & Library (Wilmington, DE) will be holding its Research Seminar Series with presentations by Eric Schatzburg on Competition and Critique: The Discourse of Technology in 20th-Century America on Feb. 7, and by Carolyn de la Pena on The Business of Diet Food: Abbott Laboratories and the Sucaryl (Cylamates) Campaign on May 13. Info: (302) 658-2400, x. 243; clockman@hagley.org.

IA Talks in New Jersey. The Hermitage, a historic house and museum, will offer the following lectures: on Feb. 14, Richard Hunter [SIA] will speak on *New Jersey's Historic Mills: Geography and Archeology*, with an overview of the state's early water-powered mills; on Apr. 17, Sarah Gordon will speak on *Calico and Culture: A Social History of the 19th-Century Textile Industry in the Northeast*, with a focus on the women who came to the early mills and the nascent labor movement. Call for reservations. Info: 335 N. Franklin Turnpike, Ho-Ho-Kus, NJ 07423; (201) 445-8311; *www.thehermitage.org.* 

National Preservation Institute Workshops. NPI, a notfor-profit organization established in 1980, offers a range of workshops designed to assist those involved with the management, preservation, and stewardship of historic sites. The workshops cover such topics as federal regulatory processes, identification of historic architecture, and care and management of historic buildings. Workshops are offered throughout the year at locations across the U.S. Info: *www.npi.org*.

The 6th biennial **Preserving the Historic Road Conference**, Sept. 11-14, 2008 in Albuquerque, NM, is dedicated to the identification, preservation, and management of historic roads. The conference will be held just steps from the historic Old Town Plaza and near the intersection of El Camino Real and US Route 66. Education sessions, keynote speakers, special events, and tours. Call for Papers: Papers should address historic road preservation and documentation strategies, engineering solutions and alternatives, highway safety, and innovative management and protection policies. International papers are welcome. Deadline: Jan. 31. Info: *www.historicroads.org*.

**Erasmus Mundus Master's Degree** in Techniques, Industrial and Cultural Heritage, Territories is being jointly offered by the universities of Paris 1 Pantheon-Sorbonne (France), Evora (Portugal), and Padua (Italy). This twoyear French-language course offers a high-quality specialization in the fields of archeology, history of technology, and industrial heritage. The training focuses on seminars and field workshops. Deadline for applications is Feb. 1. Info: *www.tpti.eu.* 

# **NOTES & QUERIES**

Info Sought on Sawmill Complexes Across the U.S. Historians in Louisiana are seeking information on extant historic sawmill complexes dating from about 1890 to 1950. The data is being gathered for comparative purposes and to support analysis of the Crowell Sawmill as among the most complete surviving examples of its type. Crowell operated from the 1910s to 1950s and has its full complement of buildings and machines, including skidders and steam locomotives. The 1997 SIA Fall Tour visited Crowell, which is being preserved as the Southern Forest Heritage Museum (SIAN, Summer 1997). Info: Patricia Duncan, Architectural Historian, Div. of Historic Preservation, Box 44247, Baton Rouge, LA 70804; (225) 342-8160; pduncan@crt.state.la.us.

Urgent Request for 3D CAD Modeling Info. Bill Gould [SIA] is researching the use of 3D CAD modeling and animation software in museums and archeological documentation for a paper to be presented at the upcoming SolidWorks World 2008 International Conference in San Diego, Jan. 20-23. If you have any information on the current or projected use of SolidWorks, AutoCAD, Cinema4D, MAYA, or 3DstudioMAX in the museum field, Bill would appreciate your contacting him at bill@gouldstudios.com; (760) 723-7144. For more about this process, check out a feature article about Bill in Cadalyst Magazine (http://manufacturing.cadalyst.com/manufacturing/article/articleDetail.jsp?id=325045). The article discusses the use of 3D CAD modeling software as used to recreate the narrow gauge Mason Bogie locomotive TENMILE, circa 1879. This 500-hr. research and design project was awarded 2nd Runner-up in the SolidWorks 2006 International Design Competition from a field of over 400 entries, most by major corporations. Bill discussed IA and emphasized the important role played by SIA, resulting in considerable interest among engineers and designers.

**Cast-Iron Stairs.** Preservationists are investigating what might be the oldest wrought-iron roof in the U.S. in the 1848 reservoir gatehouse in Brookline, MA (SIAN, Summer 2007). The building also contains two mirror image cast-iron staircases that may be in the forefront of their type. The group is seeking information on pre-1860 cast-iron staircases, including foundries, the making of patterns, and identifying marks. They know of extant stairs from the 1820s or 1830s in several prisons in Pennsylvania and New Jersey, and specifications for stairs in cast-iron lighthouses from the late 1840s. Info: Dennis J. DeWitt, Brookline Preservation Commission, 94 Upland Rd., Brookline, MA 02445; *djdewitt@rcn.com*.

**Silk Trains**. A researcher is seeking information on the trains that delivered raw silk from warehouses in the New York City area to mills in New England, upstate New York, New Jersey, and Pennsylvania from 1895 to 1935. Interests include the locations of the warehouses and securing the silk from pilfering. Info: Alan Vanterpool, *avtpool@shaw.ca.* 

Historic Films On-Line. The National Archives has announced an agreement with Customflix Labs, part of Amazon.com, to sell thousands of historic films from its collection of more than 200,000 titles. The first films that will be available are *Universal Newsreels* from 1929 to 1967, which are chockablock with items of IA interest. The DVDs will be sold on demand and can be delivered within 24 hours. Info: www.archives.gov/press/press-release/2007/ nr07-122.html.

IA in Cinema. For those looking for some off-beat IA and classic British comedy, check out *The Titfield Thunderbolt* (1953), filmed in the Cam valley just south of Bath by Ealing Studios. Scenes include steam locomotives, chain-operated water tower, hand-cranked turntable, numerous railroad bridges, and a steam roller vs. locomotive head-to-head competition. Info: http://homepages.which.net/~gor-don.dudman/titfield2.html.

The SIA notes the death of **Frank Taylor** (1903-2007), who played a key role in the establishment of the Smithsonian's National Museum of History & Technology (now National Museum of American History). In 1955, Taylor hired staff, developed exhibits, and planned and supervised the construction of the building, which some time later served as the SIA's first headquarters under the sponsorship of curator Robert M. Vogel. Taylor was the museum's director until 1964, then went on to develop a number of important Smithsonian programs, including the traveling exhibition service. He retired in 1971.—*The (London) Times (July 30, 2007)* 

Job Opportunity. The Nicholas Newlin Foundation seeks a director for the Nathaniel Newlin Grist Mill Historic Site & Foundation in Concord, PA. The site includes a working grist mill, miller's house, mill owner's house, blacksmith's shop, visitor's center, and trout-stocked stream on 172 acres. The director will be responsible for all aspects of the operations, including staff supervision, financial management, public programs, educational programs, and working with board and volunteers. The successful candidate's qualifications will likely include a graduate degree in history or museum studies, significant experience as an administrator, the proven ability to lead and inspire others, a successful record of writing and public speaking, and a demonstrated commitment to historic and environmental preservation. The director will be expected to enter fully into and become a leader in the cultural life of southeastern Pennsylvania and the wider community of mills, millers, and mill historians, and should be eager to assume this responsibility. A letter of interest and resume will be accepted until Jan. 16. Info: Prof. M.N.S. Sellers, Executive Trustee of the Nicholas Newlin Foundation, Center for International & Comparative Law, 1420 N. Charles St., Baltimore, MD 21201; msellers@ubalt.edu.

# CALENDAR

# 2008

Jan. 28-31: Building Conservation Masterclass: Conservation & Repair of Architectural Metalwork, West Dean College, Chichester, England. History of manufacture & use of iron, corrosion science, cathodic protection, surface preparation & painting, hands-on forge work. Info: Liz Campbell; (01243) 828219; *lizcampbell@westdean.org.uk*.

*Mar.* 15: 27th Annual Canal Symposium, Easton, PA. Co-sponsored by the National Canal Museum and Lafayette College. Info: *http://canals.org*.

Apr. 10-12: Business History Conference, Sacramento, CA. Info: www.h-net.org/~business/bhcweb.

Apr. 28-29: The 8th Historic Bridge Conference, Columbus, OH. See article in this issue. Info: Hojjat Adeli, adeli.1@osu.edu.

May 7-10: Vernacular Architecture Forum, Annual Meeting, Fresno, CA. Info: vernaculararchitectureforum.org.

May 8-10: Early American Industries Assn., Annual Meeting, Albany, NY. Info: www.eaiainfo.org.

May 16-19: Railroad Station Historical Society, Annual Meeting, Charleston, SC. Tours, auction, banquet. Info: Ted Xakellis, 10208 Brunswick Ave., Silver Spring, MD 20902.

May 18: Design Histories of Everyday Objects Symposium, Hagley Museum & Library, Wilmington, DE. Info: Carol Lockman, *clockman@hagley.org*.

May 29-June 1: SIA 37TH ANNUAL CONFERENCE, SAN JOSÉ, CA. Sponsored by the Samuel Knight Chapter. Paper proposals requested. Deadline: Feb. 28, 2008. See article in this issue. Info: http://knightsia.org/sia2008.

June 16-22: National Railway Historical Society Convention, Fort Worth, TX. Rail excursions and tours. Info: www.lonestarrails2008.com.

Sept. 11-14: The 6th Preserving the Historic Road Conference, Albuquerque, NM. See article in this issue. Paper proposals requested. Info: www.historicroads.com.

Sept. 24-27: Textile Society of America Symposium, Honolulu, HI. Info: www.textilesociety.org.

Oct. 9-12: Society for the History of Technology (SHOT) Annual Meeting, Lisbon, Portugal. Info: www.shot.jhu.edu.

Department of Social Sciences Michigan Technological University 1400 Townsend Drive Houghton MI 49931-1295

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

Address Service Requested

Presorted Standard Mail U.S. POSTAGE **PAID** Permit No. 2431 Minneapolis, MN