

# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume 28

Spring 1999

Number 1

# INDUSTRY IN THE CENTRAL CONNECTICUT RIVER VALLEY

## REVIEW OF THE SIA FALL TOUR '98

Over 164 SIA members and guides participated in the 1998 Fall Tour of the central Connecticut River Valley, held Sept. 30-Oct. 4. The tour concentrated on locations within a 30-mile radius of Springfield, MA. Tour participants saw an eclectic sampler of the region's industrial, agricultural, and cultural diversity, including canals and several historic factories and mills. We also viewed modern plants, several museums, a few architectural sites, an early copper mine, and the industrial landscape and power canals of Holyoke.

Precision metal fabrication developed in the central Connecticut River Valley early in the 19th century. It was a center for what became known as "The American System of Manufacturing." The region between Hartford and Springfield fostered enterprises that hinged on the ability to fabricate metal to tight tolerances and do it at competitive cost. Available water-power drew papermakers and other process industries. Arms, carpets, cottons, woolens and silks, metal products, paper, automobiles and motorcycles, chemicals and plastics—this part of the Connecticut Valley produced them all. The area abounds with evidence of early industrial activity: abandoned and active canals, dams, railroads, and mills. Some old factories continue to operate while others have modernized and expanded. The local aerospace industry developed on the area's technology base. High-tech entrepreneurial ventures, attracted by the area's supply of skilled labor, continue to replace older businesses.

The customary pre-tour event attracted 40 participants for a walk along the

Windsor Locks Canal. Currently in use as a power and process waterway, it is on the west bank of the Connecticut River between Hartford and Springfield. The 5-½ mile canal, designed for steam navigation, went into service in 1829. Four hundred workers under the direction of Canvass White, who had managed work on the Erie Canal, built it in two years. Led by Mike Raber, the tour group had an opportunity to see locks and bridges, and to observe ongoing construction of a replacement aqueduct to carry the canal over the 102-foot-wide crossing of Stony Brook.

A Thursday-evening reception sponsored by the Southern New England Chapter officially kicked off the tour at the Enfield Historical Society. Refreshments featured regional foods, notably kielbasa and a robust local cheddar known as "Granville." SIA members had the opportunity to talk to former workers from the defunct Bigelow Carpet Mill and see carpet looms and other equipment retrieved from the old mill. The group moved on to tour headquarters at the Harley Hotel for a slide show that previewed the sites on the Friday and Saturday tours.

The Hartford Clamp Company (1917), an outstanding small factory, continues to make fine woodworkers' clamps on original machinery. Power for the machines comes from an extensive overhead lineshaft system. SIA visitors sensed that they had traveled back in time and landed in a working early 20th century shop. The tour moved on to the Connecticut Trolley Museum

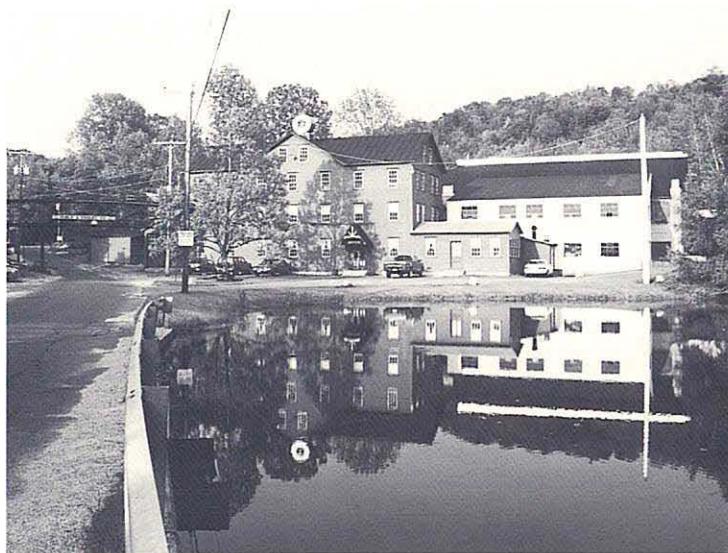
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# INDUSTRY IN THE CENTRAL CONNECTICUT RIVER VALLEY

## REVIEW OF THE SIA FALL TOUR '98

Bob Stewart photos



The Noble & Cooley Drum factory has stood adjacent to its mill pond in Granville, MA, since 1889. The company manufacturers toy and professional drums using some methods that haven't changed since it was founded. The round object at the peak of the roof is a representation of a toy drum.

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(1940) to observe operations and examine a (non-trolley) Climax logging locomotive, antique signals, motors, and controls. A trolley ride on historic rolling stock capped the visit.

The Parsons Paper Company in Holyoke (1853) was another traditional manufacturer on the itinerary. Parsons produces high-rag-content specialty and writing papers on 80-year-old machinery. Tour participants also saw a bank of turbines in Parson's basement that currently generate electricity using water supplied by Holyoke's extensive power-canal system. Several participants visited Hampden Papers, Inc. (1880). Originally named the Hampden Glazed Paper and Card Co., it operates as a paper converter specializing in coated and "glazed" papers. Glazing involved several methods of applying gloss to colored papers. During WWII the company produced "chaff" (small pieces of metal foil dropped from aircraft to confuse enemy radar) and ration coupons, a product often more valuable than currency. Tour members could see production of items in the Hampden line including laminated papers, gift wrap, greeting card stock, book covers, bags, and pouches.

A select few visited Lego Systems. This Danish toy company's Enfield plant is a modern plastic molding facility. The company produces over 2,000 different plastic parts for its toy sets using acrylonitrile, butadiene styrene, polycarbonate, polypropylene, and other plastic materials. The plant uses 28,000 pounds of molding compounds per day and produces 2.6 billion bricks and other building elements per year.

A limited tour of the Warren Company (1853) in Stafford Springs involved 30 participants. In the late 1880s, the town of Stafford was home to 13 textile mills. Today, Warren is the only mill still in operation there. An early pioneer in the woolen industry, Warren started operations by hiring skilled textile workers from Yorkshire. Today the company is one of the few inter-



A worker at Parsons Paper chops cotton slasher waste with an electric scissors for an SIA tour group. Slasher waste from southern muslin mills has largely displaced old rags as a source for making rag paper. The long cotton fibers must be shortened substantially before they can be used.

grated manufacturers of luxury fleeces, shags, and tweeds of wool blended with rare hairs such as alpaca, llama, kid mohair, camel hair, and vicuña. Tour participants observed wool processing steps from cleaning and dyeing through spinning, and weaving of high quality designer fabrics on modern rapier looms.

Thursday evening the group attended a talk by Lester Smith, prominent local historian who presented an absorbing and informative talk on the local agricultural specialty, Connecticut Valley shade-grown tobacco. The product forms the wrapper in the world's finest cigars.

The tour groups combined to visit Smith & Wesson (1852) in Springfield. The SIA group was the largest ever to tour the company, which had its first shop in a small facility on Market Street, moving into a new factory on Stockbridge Street in 1859. This plant served until the company moved to the present plant in 1950. Throughout S&W's history, it concentrated on design-

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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 annually. SIA promotes the identification, interpretation, preservation, and re-use of historic industrial and engineering sites, structures, and equipment. Annual membership: individual \$35; couple \$40; full-time student \$20; institutional \$40; contributing \$60; sustaining \$125; corporate \$250. 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.

Mailing date for Vol. 28,1 (Spring 1999), May 1999. 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.

ing and producing handguns, particularly revolvers. In recent years the company has diversified to produce a wide range of law-enforcement products such as handcuffs, bicycles, Chemical Mace, and night-vision equipment. For the civilian market, S&W now makes knives, ammunition, holsters and belts, and reloading equipment, as well as its famous line of handguns. Tour participants observed the production of firearms, police equipment, and bicycles. Later Friday evening, about 65 SIA members test-fired weapons and practiced target shooting at S&W's new firing range and firearms training facility.

The tour went on to the Indian Motorcycle Museum. In 1901, George M. Hendee and C. Oscar Hedstrom, a pair of high-wheel bicycle racers, pooled their funds and founded the Hendee Manufacturing Co. in Springfield, the name later changed to the Indian Motorcycle Manufacturing Co. Besides motorcycles, Indian produced, at various times, V-8 liquid-cooled and radial air-cooled aircraft engines, outboard engines, room air conditioners, and a primitive model of a snowmobile. Besides standard motorcycles produced for police, military, and civilian use, Indian also made armored motorcycles for police use, a sidecar taxi used in Newark and Baltimore, a street-sweeper model, and a chemical fire-fighting model. Indian cycles equipped with sidecars or trailers moved airmail and pulled personnel carts around airports. Tour participants saw many of these specialized vehicles at the museum, which occupies Indian's former engineering building. Indian made its last motorcycle in 1953.

The Springfield Armory main arsenal building (1847) fascinated SIA members with an interest in the development of precision manufacturing and firearms. Springfield Armory traces its roots back to 1777. During the American Revolution the arsenal stored muskets and cannons. It also produced paper cartridges. Throughout the years of operation, Springfield Armory led in the innovative design and manufacture of small arms. Thomas Blanchard developed his irregular gunstock turning lathe here in 1819. These shops generated the technology for producing interchangeable parts using jigs and

fixtures. Springfield Armory led in using precision tooling and gages through WWI. The M-1 and M-14 rifles had their genesis here. Tour participants viewed the armory's extensive collection of weapons and the tooling that produced them.

The group also visited the Museum of Connecticut History in Hartford, the state's official historical museum. The Colt Arms Collection and a display of items developed and manufactured in Connecticut were of special interest to SIA members. Over the years, the museum's curators have acquired a collection of patent models, vernacular production machinery, jigs, fixtures, looms, ammunition manufacturing equipment, textile machines, and early electrical equipment. All this equipment contributed to making Connecticut the hardware capital of the world and a major factor in the Industrial Revolution. The equipment is not on public display but Director Dean Nelson opened up the "back room" for our tour. Some participants took a driving tour of Hartford architectural landmarks. Bill Hosley, director of the Connecticut Antiquarian and Landmarks Society, organized and narrated the tour.

On Saturday the tour proceeded to Noble & Cooley in Granville, MA, a family-owned company that has been making toy drums since 1854 and professional drums since the early 1980s. The present factory building went up in 1889. The company's founder designed most of its equipment, some of which is still in use. The Noble & Cooley staff cleaned up and operated some original equipment for the SIA tour. A veneer cutting machine, a hoop bender, and a vernacular lithographic printer particularly appealed to SIAers, as did a wonderful array of donuts.

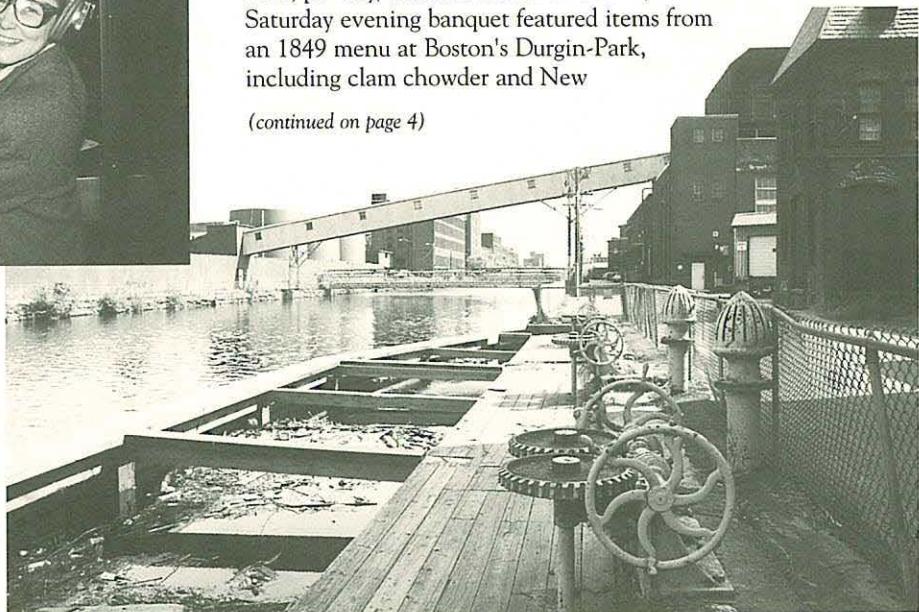
The group also toured Old Newgate Prison (1706). Newgate operated as a combined jail and copper mine. Special interpretation for the SIA tour focused on the mine's geology with visits to accessible tunnels, adits, and shafts. Holyoke Water Power Co. (est. 1859) was also on Saturday's tour schedule. The company organized to sell real estate and water rights in a planned industrial estate. An orientation program at the Holyoke Heritage Museum described the complex of canals that supplies water to the remaining industrial sites in the Paper City. The tour included Holyoke dam, the Hadley Falls generating station, antiquated electrical equipment, a fish "elevator," and a photogenic display of Holyoke's 19th-century industrial landscape.

Box lunches served on the tour reflected what local working people eat: submarine sandwiches, locally known as grinders (aka hero, po' boy, Italian Bomber or Cuban). The Saturday evening banquet featured items from an 1849 menu at Boston's Durgin-Park, including clam chowder and New

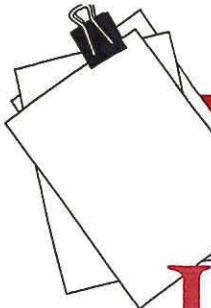
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Cece Saunders shows off her shooting skills at the Smith & Wesson range.



View of industrial landscape looking northeast on the second-level canal, Holyoke. Participants toured the canal system that provided waterpower to the paper and textile mills.



## Notes From the President

In March, I traveled to Brunswick, Georgia to take a pre-tour of this year's SIA annual conference. I will be leading a Friday bus tour from Savannah to Brunswick, and so, I met conference-coordinator Mark Finlay there to visit sites and work out timing and mileage. Brunswick is one of my hometowns (as a Navy brat I have several hometowns) and I am excited that I will get to show off Liberty ships, Brunswick stew, and "The Factory That Never Was."

When you receive this year's conference mailing, few of you will know just how much hard work goes into putting together a conference. Or, how great the rewards are when the tour is completed and well received.

Two years ago Mark Finlay, who teaches industrial and economic history at Armstrong Atlantic State University, approached the board to propose Savannah as the site for the 1999 meeting. Mark had attended a number of meetings and had a strong list of sites for us to tour. We gave him the green light and a copy of the SIA Tours "Bible," which is a step-by-step guide to putting together an annual conference or fall tour.

For the last two years Mark has worked closely with SIA director Ann Steele, our tours coordinator. They have arranged the hotel, receptions, meetings, and parties. Although I know the highlight of the annual conference is the business lunch on Saturday, a lot of people also go for the tours.

For the last year and a half Mark has been visiting potential sites in Savannah and the eastern Georgia lowlands. He has watched companies move on and off his list. Great sites have closed, new sites have opened. Changes in management can mean that at the last minute a company will decide it does not want tours. Changes in the economy can shut down shifts when we might want to visit. Fortunately, the diversity of economy and industry in the Savannah area has provided Mark with a large pool from which to choose.

Mark has put together a lively and diverse set of tours, from Brunswick to inland Jesup to the ports and greater Savannah. He has the advantage of a class of active and engaged students who are researching all of the companies on the list and putting together a top notch tour guide. He has another advantage in that when "Mr. Sherman" visited Savannah in December of 1864 he did not burn the city, but gave it to President Lincoln as a Christmas present. Thus, much of the early history of Savannah survives.

This will be only our second annual conference in the south. Come prepared for some great Southern charm, character and food. Come prepared for warm weather. You will have the opportunity to wander among Colonial, Early National and Victorian neighborhoods in the best preserved city in America. While you are having a great time, remember to congratulate and thank Mark and his crew for a job well done. Watch what they have done, ask questions of Mark, Ann, or any other board member. Think about your hometown. What do you have to offer? While an annual conference may be too much for a small group of SIAers, maybe your town would support a fall tour. We are always looking, we have the "Tour Bible" and we provide lots of support and encouragement.

See ya'll in Savannah.

Sandy Norman  
Boca Raton, Florida

## INDUSTRY IN THE CENTRAL CONNECTICUT RIVER VALLEY REVIEW OF THE SIA FALL TOUR '98

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England boiled dinner (root vegetables, cabbage, and corned beef). Vegetarians dined on a "Bale-of-Hay," the same meal without the meat. Dessert featured old New England favorites: "coffee jelly," and apple pie and cheese. Held at the New England Air Museum, tour participants were seated on the museum display floor amid historic aircraft, restorations, and reproductions. Some cockpits were open and accessible.

Sunday's post-tour activities included an intensive all-day expedition along the route of the Farmington Canal (1829). We stopped and examined the extensive remains of locks, aqueducts, bridges, and a restored portion of the canal. Ruth Hummel and Carl Walter, who has recently finished a 20-year project to organize canal historical information and maps in a computer data base, led this tour. The committee also organized post-tour, do-it-yourself driving excursions. These included maps and routings to western Connecticut iron industry sites and guidance to several places of interest to SIA members in eastern Massachusetts and Rhode Island. Twenty-one participants set out on the diverse trails identified in the guidebook.

The tour offered a fast-paced, concentrated, close-up look at the variety of industry in the central Connecticut River Valley. We saw historical manufacturing technology that hasn't changed very much since the late 19th century and were able to contrast it with modern high-speed production methods. SIAers viewed the great variety of locally manufactured products and historic firearms preserved in museums. We also focused on some significant early sites in the Industrial Revolution.

The tour could not have been run without tour guides: Arnold Carlson, Nancy and Constant Dickenson, Bob Grzywacz, Cece Saunders, Jim Trocchi, and Fred Warner. Special credit goes to SIA's "Man in Holyoke" Sandy Noyes, and to Jacquie and Gerry Wadsworth, who handled registration and organizational details. Pat Malone and Dave Poirier provided valued advice and comment. Dave Engman and the tour guides wrote the guidebook and Sallie Stewart's work in overseeing the food and logistical details was greatly appreciated. Including the tour escorts provided by the companies and museums we visited, the bus drivers, hotel staff, caterers, and food service people, about 90 individuals took part in managing and operating the SIA Fall Tour. They all deserve the organization's recognition and appreciation.

B. S.

### CONTRIBUTORS TO THIS ISSUE

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With thanks

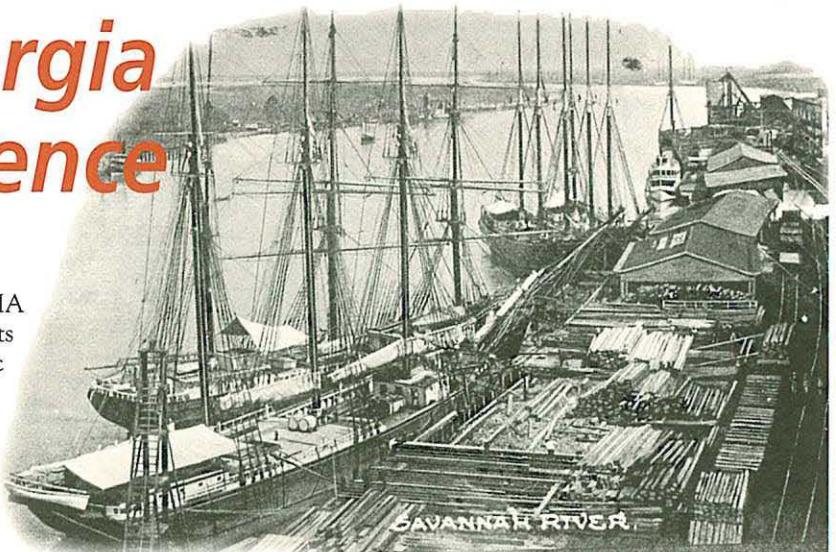
# Savannah, Georgia Annual Conference

June 3-6

The final arrangements are set for the 1999 SIA Annual Conference in Savannah. Though its tourist office cultivates an image of romantic city squares and antebellum mansions, Savannah has been the home of a surprising range of important industrial developments. From the days of Eli Whitney's 1793 cotton gin, to the 1999 opening of the largest and most modern cotton gin factory in the world, Savannah's economy has been linked continuously to its port, and to its processing of the food, fiber, and forest products of southern Georgia. Tours have been scheduled around the port and the city, as well as into the hinterlands of the swamps and piney woods to capture the full flavor of the region's industrial past and present.

Scheduled process tours include luxury jet airplanes, yacht refurbishing, ethnic hair care products, textile dyes, paper, precision dental equipment, and specialty costumes. Cotton ginning, kaolin cracking, rosin processing, and creosoteing will also be offered as options. A few cottage industrial sites will be included, such as wooden kayak makers and manufacturers of the specialized vehicles used on the local docks. One tour is scheduled south to Brunswick to take in shipbuilding, armaments, seafood processing, and rice milling.

The Thursday reception will be held in the former passenger shed of the Central of Georgia Railway, which now houses the Savannah History Museum. The conference paper program will be held on Saturday with an evening banquet at the historic railroad shops. The cuisine and the entertainment will have a local flavor. Throughout the conference experts will offer walking tours



Savannah Port scene, ca. 1890

of the local architecture and industrial history of downtown Savannah. Sunday's optional tours will focus on the port with a harbor cruise, or a bus tour of historic industrial sites and buildings beyond the central business district.

Registration materials were mailed to SIA members in April. The conference hotel is the Hyatt Regency Savannah (1-800-233-1234). For specific questions about tours, meals, entertainment, and fees, contact Charlotte Brawner Sauers, Coastal Heritage Society (912) 651-6895; fax 651-6971. For more general questions about the conference, contact Mark Finlay, Dept. of History, Armstrong Atlantic State Univ., Savannah, GA 31419. (912) 921-5642; fax, 921-5581; e-mail: [mark\\_finlay@mailgate.armstrong.edu](mailto:mark_finlay@mailgate.armstrong.edu).

Please visit the conference website [www.hist.armstrong.edu/SIA/conference.htm](http://www.hist.armstrong.edu/SIA/conference.htm) for thorough descriptions of tours, abstracts, suggestions for further reading, tourist information, maps, and updates of any schedule changes. The website will be updated at least each week until the conference.

## LETTER TO THE EDITOR

### On Union Stations

To the Editor:

In the SIAN (Fall 1999), one reads that "The original [Indianapolis, IN] 1852-53 Union Station . . . ranks as the earliest union station in the nation." But in the IA Journal (25,1), one reads that the 1846 Providence [RI] station, planned to serve the Boston & Providence Rail Road and the Providence & Worcester Railroad ". . . would be a Union Depot, the country's first . . ." A union station (or depot) invariably is defined as a station serving more than one railway . . . Indianapolis Union certainly was not the first, and the statement in the SIAN sits in uncomfortable contradiction to the assertion in the Journal! There is substantial documentation attesting to the existence of at least six stations serving more than one railway (three in Boston, one in New Haven, one in Philadelphia, and one in Baltimore) that were operational in 1850.

Henry Austin's 1848 New Haven [CT] station, built to serve the New York & New Haven and the Hartford & New Haven, is well-documented both in railway and architectural literature. It may have been the site of this station, at Chapel and Union streets, that gave rise to the term "union station." A practical need arose

in New Haven to differentiate amongst the New York & New Haven's station (sometimes referred to as the Chapel Street station), the Hartford & New Haven's station at Belle Dock (which was located off Chapel Street), and the New Haven & Northampton's station, on Temple Street. Reference to a "Chapel Street" station would not be helpful, since it referred to two separate stations, but "Union Street" could mean only one station. The uniquely regarded "Union Street" station served the NY & NH and the H & NH from 1849.

There may have been "union stations" earlier than the Providence depot (ah! the correct noun) of 1846! Stations commonly were built where the lines of two railways intersected, and where one railway's line branched from that of another, and there were many such instances prior to 1846. Whether these sites had one or two or more station edifices is not easily determined from the literature, but—arguably—in that these companies were not in competition, and undoubtedly were not in a position to spend funds on unnecessary structures, it may have been common practice to share a facility or "union station."

Alan M. Levitt  
Fresh Meadows, NY

# Whither Industrial Archeology

**A**bout one hundred IA faithful gathered at Lowell National Historic Park Nov. 12-14, 1998, to assess how our field has developed over the past three decades and contemplate directions for the coming quarter-century. Although we had what appeared to be a promising program, there was a sense of uncertainty about how the weekend would unfold, owing to the nebulous nature of the objectives for the gathering and because—horror of horrors—this particular SIA event was not centered around at least a full day of process tours. As chair of the program committee, I am pleased to report that “Whither Industrial Archeology” was an invigorating success.

A strong slate of speakers got the program off to a good start on Thursday. Our first SIA General Tools Award winner, Emory Kemp, offered his vision, as one of our founders, of where we can take our field. Marie Nisser, a professor at the Royal Institute of Technology in Sweden and a past president of The International Committee for the Conservation of the Industrial Heritage, provided an excellent review of the contributions our field makes to other areas of scholarship. Matt Roth capped off the evening with a rousing challenge to all of us to combine the strengths of our practice with the insights current trends in scholarship bring to the analysis of the industrial landscape. He articulated the hope that we can thereby instill in younger generations the appreciation for today's built environment as the embodiment of the more recent industrial age.

Friday and Saturday were devoted to a full schedule of papers. There were no concurrent sessions, so all the participants were able to hear each presentation commissioned by the program committee. Morning and afternoon paper sessions were followed by break-out discussions, which proved to be one of the livelier aspects of the weekend. Following each of the formal panels, which were grouped thematically, participants could choose between two topics to further discuss issues opened by the formal presentations.

Friday morning, following a panel of papers addressing issues of compliance with federal regulations and the design of preservation projects, participants in the symposium gathered to discuss that set of issues either from the perspective of persons and companies working as contractors or from the perspective of those involved in preservation projects. One concern addressed at the preservation discussion, led by Kim Hoagland, was the failure of projects aimed solely at bricks and mortar to preserve information about the work that took place within buildings before they ceased being industrial plants. Folks in the contracting discussion, moderated by Mike Raber, grappled with problems of unqualified firms producing shabby work and with ways to make reports and other products available to a public beyond the immediate client.

Friday afternoon's presenters concerned themselves with interpretation: methods for deriving understanding from artifacts in the field, and methods for conveying those understandings to the public. Break-out groups then discussed those issues as they relate to smaller artifacts and to sites and districts. In the former group, Larry Lankton led a discussion of the evolution of thinking about artifacts from being a focus in themselves to being symbols, teaching tools, and props to help in storytelling, especially in museums. Vance Packard coordinated the

discussion of sites and districts, in which issues ranged from the pitfalls of Disneyesque interpretations, often used to try to attract young people, to opportunities offered by larger sites to allow visitors sensory experiences (e.g. sounds and smells) not often possible in museums.

Saturday morning's panel featured papers concerning industrial archeology and education, especially the education of practitioners. Lively discussions afterward allowed participants to consider either breaking barriers within the academy, in a session moderated by Sandy Norman, or reaching beyond the academy, led by Carol Poh Miller. A major feature of both discussions was the frustration often felt by industrial archeologists that we have important insights to offer, but those who could benefit by our work are little interested. As with other discussions, lots of experiences were shared, suggestions and criticisms were offered, but conclusions could not be firmly drawn. Resolving the problems our field faces is an ongoing process in which we can usually hope for little more than finding local solutions and moving on to the next problem.

Saturday afternoon featured four papers addressing the broad theme of future directions for industrial archeology. After the session, the symposium participants remained for a single discussion moderated by John Light. The closing discussion allowed folks to respond to the afternoon papers and also to offer concluding thoughts on the symposium. By this time, energy had been building, and many in attendance were bubbling with enthusiasm, wanting to take their inspiration beyond the confines of Lowell's DoubleTree Hotel to change society, to find ways to convince our friends and neighbors of the important lessons we can learn from the physical remains of our industrial past.

To close the symposium, most participants moved downtown for a banquet at the Southeast Asia restaurant. After a spicy meal, Charlie Hyde offered some concluding remarks, masterfully mixing wit with a serious evaluation of the state of the field of industrial archeology as demonstrated by the excellent papers presented over the weekend and the spirited discussions they engendered, both in the break-out sessions and in the hospitality suite and other informal venues.

No proposals for new legislation emanated from “Whither Industrial Archeology,” but I've heard reports of many participants returning home to their work and their community activities with a renewed sense of vigor. For example, Jane Carolan immediately went home to Newburyport and wrote an article for her local newspaper, *The Undertoad*, on the importance of industrial history to her town's past.

Those who missed the symposium will be able to read many of the papers in a forthcoming publication the Society plans to issue. Watch the SIAN for details as they develop. You may also get some sense of the issues discussed by requesting summaries of the break-out sessions. Volunteers took notes of each session and prepared typed summaries from those notes. The summaries will be part of the report on the symposium sent to the SIA archives at the Smithsonian Institution, but if you would like a copy of the summaries, contact Fred Quivik, 2830 Pearl Harbor Rd., Alameda, CA 94501, or e-mail: [fquivik@lmi.net](mailto:fquivik@lmi.net).

F. Q.



# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

A Supplement to Vol. 28, No. 1

Spring 1999

### PUBLICATIONS OF INTEREST

#### COMPILED BY

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

#### GENERAL INTEREST

- Christopher Andreea. *Lines of Country: An Atlas of Railway and Waterway History in Canada*. Stoddart Publishing (1-800-805-1083; e-mail: [gdsinc@genpub.com](mailto:gdsinc@genpub.com)), 1998. 560 photos; 39 full-page color maps; 238 oversize pages; 1,375 lines, companies, agencies, indexed and chronicled. \$75 US, \$95 CDN. Useful reference work with outstanding maps and encyclopedic attention to detail.
- Dennis Arbogast, Fred A. Klancnik, and David Bodamer. *This Time with Feeling*. Civil Engineering 68 (Oct. 1998), pp. 56-9. Redevelopment and reuse projects, including waterfronts in Racine, Kenosha, and Sheboygan, WI. Transformation of a former airforce base into a planned residential community.
- David Edgerton. *Science, Technology and the British Industrial 'Decline,' 1870-1970*. Cambridge Univ. Pr. (New York), 1996. 88 pp., index. Using previously unknown statistical data, draws new and controversial conclusions about British innovation and technical training since 1870 and provides a guide to the debates about the subject.
- Stanley Greenberg. *Invisible New York: The Hidden Infrastructure of the City*. Johns Hopkins Univ. Pr., 1998. 90 pp., photos. \$29.95. Collection of 53 b&w photos of dams and disused waterworks, corroded railyard shelters, bridges, and a missile silo.
- Alvin Johnston. *A Time to Fish and a Time to Dry Nets—Lake of the Woods*. Lakewood Publishing Co. (Box 907, Warroad, MN 56763), 1996. 260 pp. \$16 ppd. paper. A vivid picture of what life was like around Lake of the Woods, inc. chapters on hunting, mink ranching, logging and politics, by a commercial fisherman who worked the lake and was a lobbyist for the Minnesota Fish Producers Assn.
- Ohio Valley Historical Archaeology. Published annually. Avail: Kit Wesler, Wickliffe Mounds Research Center, Box 155, Wickliffe, KY 42087-0155. Vol. 11 - \$18; Vol. 12 - \$17; Vol. 13 - \$18. Shipping - \$1.50 first vol., \$1 each additional. Recent issues include:  
  
Vol. 11 (1996): Bonnie L. Gums, *Yellow Ware in Illinois: The Wilhelm's Kiln*, pp. 69-86; Charles D. Hockensmith and Larry D. Meadows, *Historic Millstone Quarrying in Powell County, Kentucky*, pp. 95-104; Charles D. Hockensmith, *The Patton Grindstone Quarry, Powell County, Kentucky*, pp. 105-144; Charles D. Hockensmith, *Archaeological Investigations at the Rudd Lime Kiln, Livingston County, Kentucky*, pp. 115-124.

Vol. 12 (1997): Charles D. Hockensmith, *Investigations at an 1834 Section of the Lexington and Ohio Railroad, Frankfort, Kentucky*, pp. 1-15; Jan Marie Hemberger, *The Industrial Archaeology of a Mid-19th Century Oil Field, Venango County, Pennsylvania*, pp. 16-31; Kira E. Kaufmann, *An Industrial Archaeological Survey of the Ice Industry Along the Fox River, Kane County, Illinois*, pp. 32-38; Derek M. Wingfield, Michael D. Richmond and Henry S. McKelway, *Archaeological Remains of a Mid-19th Century Brick Clamp: A First Look at Brick Clamps in Kentucky*, pp. 68-88; Charles D. Hockensmith and M. Jay Stottman, *Investigations at the Maysville Brick Company: An Example of Industrial Archaeology in Kentucky*, pp. 89-111.

Vol. 13 (1998): Charles D. Hockensmith, *Ebenezer Stedman's Mills: A 19th Century Paper, Grist, and Lumber Milling Complex near Frankfort, Kentucky*, pp. 80-85.

- A. W. Skempton, ed. *Civil Engineers and Engineering in Britain, 1600-1830*. Valorium, 1996. 338 pp., illus. \$107.95. Collection of papers by author of over 45 years of study. Includes early professional societies, biographies, river navigation and harbor improvements. Rev: *T&C* (Jan. 1999), p. 149.
- Ann and Jurgen Wilde and Thomas Weski, eds. *Albert Renger-Patzsch: Photographer of Objectivity*. M.I.T. Press, 1998. Photos. \$60. Renger-Patzsch was a leader in the New Objectivity movement and embraced modern industrialism, taking photographs of trains, machines, quarries and slag heaps. He is credited with being a stylistic model for Bernd and Hilla Becher who "portray the decline and fall of the very industrial order he glorified." Originally published in Germany, this book collects 113 of his b & w photos from the 1920s to 1960s.

#### RAILROADS

- Walter A. Appel. *ALCO Official Color Photography*. Morning Sun Books (9 Pleasant La., Scotch Plains, NJ 07076), 1998. 128 pp. \$49.95. Over 200 color photographs taken by the American Locomotive Co. photographer covered diesel locomotive production at Schenectady, NY from the late 1940s to 1969 when the plant ceased production.
- Ted Benson. *Done Honest & True: Richard Steinheimer's Half Century of Rail Photography*. Pentrex (1-800-950-9333), 1999. 96 pp., photos. \$29.95. 130 b&w photos by famous railroad photographer, selected to show a 50-yr. record of the changing face of American railroading. Dramatic night scenes, snowscapes and steam, evocative portraits of men and machines.

- Albert Churells. **From Steam to Diesel: Managerial Customs and Organizational Capabilities in the 20th-Century American Locomotive Industry.** Princeton Univ. Pr., 1999. \$45. How GE and GM drove established steam locomotive builders out of business. According to Hank Rentschler [SIA], "this book is a must read for anyone interested in some of the earliest manufacturers of locomotives, and how they failed to make the transition to modern, diesel locomotives. This dissertation is also a classic study of enormous successes of certain industrial production techniques and how later management, in full control of their destiny, made mistake after mistake, and ultimately destroyed what had taken decades to build . . . Churells has an excellent grasp of the technical aspect of locomotive manufacturing, along with related business and financial matters."
- Ken Frazer. **The Making of a Railroad Signalman.** VR (Mar./Apr. 1999), pp. 50-54. Firsthand account of the initiation into the signalman's job on the Lackawanna RR in the 1940s.
- H. Roger Grant. **Railroads in the Heartland: Steam and Traction in the Golden Age of Postcards.** Univ. of Iowa Pr. (Iowa City), 1997. 181 pp., illus. \$29.95. Collection of more than 100 postcards organized by category: railroad landscapes, depots, other railroad facilities, people and the iron horse, and electric interurban lines, and printed one per page with a lengthy caption describing the view and putting it in context. The five chapters document railroading in Ohio, Ind., Ill., Mich., Wisc., Minn., Iowa, and northern Missouri from 1905 to 1915.
- John Gruber. **Pittsburgh Project Views Steam Railroading.** VR (Mar./Apr. 1999), pp. 32-41. Recording by photography Pittsburgh's railroads and industry in the 1950s.
- Aaron Isaacs, ed. **Twin City Lines-The 1940s.** Minnesota Transportation Museum (3816 Vincent Av. S., Minneapolis MN 55410), 1995. 38 pp., illus. \$10.00 ppd. Heavily illustrated booklet transports the reader back to "the last decade of really first class public transit in the Twin Cities." Uses extensive quotes from people who rode and worked on the cars and includes a glossary of streetcar terms.
- Ed King. **Up the Creek in a Leaky U-Boat.** VR (Mar./Apr. 1999), pp. 68-77. History and use of GE's U25B diesel locomotive, introduced in 1960.
- O. Winston Link. **The Fading Giant: Sounds of Steam Railroading.** O. Winston Link Railway Productions (4920 Buckhorn Road S. W., Roanoke, VA 24014). CD recording. \$20. Unavailable for years, sounds of the Norfolk and Western captured on 1950s state-of-the-art recording equipment by the photographer of the last days of steam.
- Arthur C. McWatt. **"A Greater Victory:" The Brotherhood of Sleeping Car Porters in St. Paul.** Minnesota History 55 (Spr. 1997), pp. 202-216. The influence of St. Paul activists in the establishment of the national union and in breaking the stranglehold that the Pullman Co. had over its African-American porters. Good descriptions of what work life was like for the porters. Ample attention to the support provided by wives who continued union organizing and fundraising while the porters were on the road.
- Michael Malone. **James J. Hill, Empire Builder of the Northwest.** Univ. of Oklahoma Pr. (Norman), 1996. 306 pp., maps, bibliog., index. \$29.95. This treatment is half the length of earlier Hill bios by Joseph Pyle and Albro Martin but benefits from scholarship considered unseemly by the former and unavailable to the latter. Rev.: Minnesota History 55 (Fall 1996), pp. 131-2.
- Anne Matthews. **End of an Error. Preservation** (Mar./Apt. 1999), pp. 42-51. The NJ Meadowlands landfill where archeologists are recovering architectural remnants of New York City's legendary Penn Station.
- Fred Matthews. **The Red Cars Recalled: "I'll Never Forget Those Whistles."** VR (Jan./Feb. 1999), pp. 66-76. Pacific Electric Railway in Los Angeles. History and photos from the late 1940s and 1950s.
- Robert S. Maxwell. **Whistles in the Piney Woods: Paul Bremond and the Houston, East and West Texas Railway.** University of North Texas Press (Denton, 1-800-826-8911), 1999. 128 pp., photos. \$24.95.
- William D. Middleton. **At the Heart of the New York Central.** VR (Mar./Apr. 1999), pp. 56-66. Scenes along the Hudson River in the 1940s and 1950s. Also restoration of Grand Central Terminal.
- John H. White, Jr. **A Rule of Iron, A Box of Gold. Timeline** (Nov./Dec. 1998), pp. 32-39. William H. Clement, engineer, and the Little Miami RR in southern Ohio from the 1840s to 1880s. Article inspired by a gold box (recently auctioned by Sotheby's) given to Clement by the officers and employees of the Cincinnati RR Co. in 1881.

## WATER TRANSPORTATION

- Scott F. Anfinson. **The Wreck of the USS Essex.** Minnesota History 55 (Fall 1996), pp. 94-103. A 19th-c. sloop of war designed by one of America's foremost architects, Donald McKay. It was later assigned to the Minnesota Naval Militia in Duluth for training and later converted to offices. It was finally sold for scrap and burned at Minnesota Pt. in Lake Superior where the wreck remains.
- Material History Review 48 (Autumn 1998) is a theme issue dedicated to *Ships, Seafaring and Small Craft*. Includes: John Summers, "Probably the Most Beautiful Rowboat Afloat;" *The Form and Meaning of the St. Lawrence Skiff*; Hallie Bond, *The "Featherweight and the Backwoods" and the Evolution of the Pack Canoe*; Brad Loewen, *Recent Advances in Ship History and Archaeology, 1450-1650: Hull Design, Regional Typologies and Wood Studies*; David McGee, *The Amsler Integrator and the Burden of Calculation*; Scott M. Stroh III, *Snagboats and "Dead-Heads": Interpreting Maritime History Onboard the W. T. Preston; Reflecting and Reliving Watermen's Work*; Nicolas Landry, *Culture matérielle et niveaux de richesse chez les pêcheurs de Plaisance et de l'Île Royale, 1700-1758*. MHR is published twice yearly by the National Museum of Science & Technology, Box 9724, Station T, Ottawa, Ontario K1G 5A3.
- Edward A. Mueller. **Upper Mississippi River Rafting Steamboats.** Ohio Univ. Pr. (Athens), 1995. 117 pp., illus. A compendium, in words and pictures, of the owners, crew members, and boats that plied the river, tending the gigantic log rafts en route to sawmills downstream from the 1860s until 1915.
- Edward A. Mueller. **Steamships of the two Henrys : being an account of the maritime activities of Henry Morrison Flagler and Henry Bradley Plant.** E. A. Muller, Jacksonville,

FL. 230 pp., illus., maps. Steamboat lines in Florida and the men who built them.

- Andrew C. Revkin. **In Harbor Mud, A Vanishing Era: New York's Ghost Ships May Soon Be Lost Again.** *New York Times*, 3 January 1999, Metro section, pp.23, 26.  
Description of the abandoned ships in the New York harbor, documentation efforts, historic significance, and plans for removal by the Army Corps of Engineers. Inc. photos of some of the wrecks.

### AIR TRANSPORT

- Malcolm J. Abzug and E. Eugene Larrabee. **Airplane Stability and Control: A History of Technologies That Made Aviation Possible.** Cambridge Univ. Pr. (New York), 1997. 390 pp., illus. \$54.95. An informal history of the personalities and events surrounding the development of airplane stability and control, charting both the science and its applications.
- Eric Schatzberg. **Wings of Wood, Wings of Metal: Culture and Technical Choice in American Airplane Materials, 1914-1945.** Princeton Univ. Pr., 1999. \$49.50. Cultural biases behind the shift from wood to metal in the American aircraft industry.
- Guillaume de Syon. **The Zeppelin Museum in Friedrichshafen.** *T&C* v. 40,1 (Jan. 1999), pp. 114-119. Exhibit review of fascinating museum in German town of Friedrichshafen, manufacturing center for the giant airships from 1900 until 1940s.

### POWER GENERATION

- T. Lindsay Baker. **North American Windmill Manufacturers' Trade Literature.** Univ. of Oklahoma Pr., 1998. 608 pp., illus. \$37.50. Comprehensive bibliographic guide to historic windmill manufacturers' trade literature in scores of repositories throughout North America and overseas. The fruit of 25 years of systematic research.
- T. Lindsay Baker, ed. **Windmillers' Gazette.** Quarterly. Avail: Box 507, Rio Vista, TX 76093. Vol. 17,4 (Autumn 1998) includes *Gingerbread Trim for Platforms on Wooden Wind Mill Towers; American Wind Power Center Opens in Lubbock, Texas; The Coming of Windmills to Yucatan.*
- John Bowditch. **A Gothic Novelty.** *T&C*, v. 40,1 (Jan. 1999), pp. 98-101. Ornamentation of steam engines in the 19th century, highlighting the great Novelty Works beam engine at the Henry Ford Museum as the finest surviving example.
- Larry Buhr. **Lost to History: The A. L. Cole Generating Station and Its Industrial Heritage.** *Saskatoon History Review* (SHR) v.13, pp.24-36 (1998). Venerable Western Canadian power generating site and numerous adaptive reuse attempts which ultimately failed. Avail: Distributor, SHR, 674 University Dr., Saskatoon, SK, S7N 0J2, Canada.
- Robert Coates-Stephens. **The Gods are Back in Power.** *Country Life*, 15 October 1998. Reuse of the 1912 Art Nouveau Montemartini power station in Rome's old industrial quarter as a temporary exhibition space for the Greek and Roman sculpture collection of the Musei Capitolini while the museum undergoes a long-term restoration. The classical marble heads and torsos are displayed against the background of the powerhouse's boilers and turbines.

- Mikael Hard and Andreas Knie. **The Grammar of Technology: German and French Diesel Engineering, 1920-1940.** *T&C*, v. 40,1 (Jan. 1999), pp. 26-46. Study of national differences in German and French diesel engineering from the perspective of linguistics.

- Richard Hills. **Power from Steam: A History of the Stationary Steam Engine.** Cambridge Univ. Pr. (New York), 1993. 354 pp., illus. \$33.95 pap.
- James Walton. **Windpumps in South Africa.** Human & Rousseau, Capetown, S. Africa, 1998. Avail: BHB International, Box 1857, Murray Hill, NY 10156; (212) 593-1830. 77 pp., illus. The turbine-wheel water-pumping windmills in southern Africa. Rev: *Windmillers' Gazette* (Autumn 1998), p. 9.

### MINES & MINING

- George Harvan. **The Coal Miners of Panther Valley.** Canal History & Technology Pr. (National Canal Museum, 30 Centre Square, Easton, PA 18042), 1998. 48 pp. photos. \$22.70 ppd. Collection of b&w photos of anthracite coal miners from the 1950s to 1970s. Introductory essay by Thomas Dublin.
- Aharon Oren and Carol D. Litchfield. **Early Salt Production at the Dead Sea and the Mediterranean Coast of the Holy Land.** *Journal of Salt History* v. 6 (1998), pp. 7-18. International journal of salt history includes many articles and miscellaneous items on salt mining and production from ancient times to present.

### BRIDGES

- David P. Billington. **Robert Maillart: Builder, Designer, and Artist.** Cambridge Univ. Pr., 1997. 331 pp., illus. \$70. Latest in a series of books by the author about the Swiss master of reinforced concrete. Rev: *T&C* (Jan. 1999), p. 154.
- George A. Gesner and José Jardim. **Bridge within a Bridge.** *Civil Engineering* 68 (Oct. 1998), pp. 44-7. Two automobile lanes and a railroad deck were added to the Tagus River Bridge, completed in 1966. When built, it was the longest bridge in Europe and inc. the world's longest continuous truss.
- Vahid Ownjazayeri and David A. Peters. **Rebuilding History.** *Civil Engineering* 68 (Oct. 1998), pp. 64-7. Restoration of, and addition of a new independent superstructure to accommodate high-speed rail service to, the Canton Viaduct in Canton, MA, built in 1835, the second-oldest multiple-arch masonry viaduct in the country.

### WATER CONTROL & RECLAMATION

- Peter C. Mancall. **Rivers and the Making of a Nation.** Southwest History Center (Southwest State University, Marshall MN), 1995. 22 pp., \$3.00 + \$1.50 p & h. Examines the historical manipulation of the nation's rivers and some of the untoward consequences of our national hubris.
- D. L. Vischer and W. H. Hager. **Dam Hydraulics.** John Wiley & Sons (New York), 1998. 316 pp., photos, diags. \$44.95. The hydraulic principles associated with the design, construction and refurbishment of dams.

## BUILDINGS & STRUCTURES

- James Ayres. *Building the Georgian City*. Paul Mellon Center for Studies in British Art/Yale Univ., 1998. 280 pp., illus., index. \$65. New materials and manufacturing methods of the Industrial Revolution influence Britain's urban architecture in the late 18th c. Many forgotten originators and entrepreneurs.
- Norbert S. Baer. *Conservation of Historic Brick Structures*. Donhead Pub., Shaftesbury (UK), 1998. 506 pp., illus. Avail: PRG Inc., Box 1768, Rockville, MD 20849; (301) 309-2222. Collection of papers and state-of-the-art information about conserving brick structures. Rev: NCPTT Notes (Feb. 1999), p. 8.
- John Davidson. *Simone Swan Adores Adobe*. *Preservation* (Mar./Apr. 1999), pp. 52-59. In the remote Texas bordertown of Presidio, a woman revives mud brick homebuilding with methods imported from Egypt.
- Ronald C. Tobey. *Technology as Freedom: The New Deal and the Electrical Modernization of the American Home*. Univ. of Calif. Pr., 1997. 316 pp., illus. \$35. The role of New Deal programs, especially the TVA, in bringing a plethora of electrical appliances into the average American residence.

## LOGGING & LUMBERING

- Eric Bracher. *The History of the Linn Tractor*; Ernest L. Portner. *Logging with Linn Tractors in Upstate New York*. *Timber Times* 20 (Mar. 1998), pp. 10-19. Avail: Box 219, Hillsboro OR 97123. Unusual half-track type tractor developed by Holman Harry (Linn) Flannery in 1910s. Intended to carry heavy logs, it was adapted to excavating.
- Bill Gove. *J. E. Henry's Logging Railroads: The History of the East Branch & Lincoln and Zealand Valley Railroads*. Bondcliff Books (Box 385, Lincoln, NH 03561), c. 1998. 200 pp. \$25.95. The timber and logging railroad empire of James Everell Henry, known as "the wood butcher" of New Hampshire's White Mountains. Rev: *Timber Times* 20, p. 5.
- Michael Thoele. *Bohemia: The Lives and Times of an Oregon Timber Venture*. Oregon Historical Society Press, c. 1998. 647 pp. \$35. Corporate history of the Bohemia Lumber Co. (1911-1991). Rev: *Timber Times* 20, p. 48.
- Charles E. Twining. *F. K. Weyerhaeuser, a Biography*. Minnesota Historical Soc. Pr. (345 Kellogg Blvd., St. Paul MN 55102; phone: 1-800-647-7827), 1997. 332 pp. \$29.95. Business and family biography of the eldest grandson of Frederick Weyerhaeuser, the founder of the family lumber business. The conservative Frederick King Weyerhaeuser maintained a sprawling decentralized structure that provided multiple leadership niches for men of the family, accommodating their divergent styles and business judgements. It is a year-by-year account of a rather muddling third-generation empire. Rev.: *Minnesota History* 56 (Summer 1998), pp. 97-8.
- Lionel Youst. *The Coos King Gas Donkey*. *Timber Times*, No. 19 (Aug. 1998), pp. 28-31. Light, fast machines, manufactured by the Coos Bay (OR) Iron Works, used for hauling and yarding second-growth timber, ca. 1920-1950.

## TEXTILES

- John Fleischman. *Small-Town Mill, Big-Time Museum*. *Preservation* (Mar./Apr. 1999), pp. 23, 26. Adaptive reuse of 13-acre, 27-building complex in North Adams (MA), formerly the

Arnold Print Works (ca. 1865-1900), manufacturer of color-printed textiles. Until recently the factory housed Sprague Electric. It has been converted to a contemporary art museum.

- Nancy L. Green. *Ready-to-Wear and Ready-to-Work: A Century of Industry and Immigrants in Paris and New York*. Duke Univ. Pr., 1997. 426 pp., illus. \$19.95. Comparative history of the needlework trades.
- Maureen Fennell Mazzaoui, ed. *Textiles: Production, Trade and Demand*. Ashgate Publishing Ltd. (Old Post Rd., Brookfield VT 05036-9704), 1998. 352 pp. \$107.95. Textiles within the expanding global economy in the Age of European Exploration. Looks at responses to competition, evolving techniques and modes of production, and changes in the patterns of consumption of local and imported cloth in a comparative cross-cultural context. Individual essays focus on world regions and individual countries, such as Iran, British North America, Spanish colonial America, Brazil, China, Southeast Asia, India, and West Africa.

## IRON & STEEL

- Gregory Galer, Robert Gordon and Frances Kemmish. *Connecticut's Ames Iron Works: Family, Community, Nature, and Innovation in an Enterprise of the Early American Republic*. Connecticut Academy of Arts & Sciences (Box 208211, New Haven, CT 06520; (203) 432-3113), 1999. \$13.95 ppd. The difficulties and complexities of establishing an industrial enterprise in the 1830s and the struggles undertaken by Horatio Ames and his associates through 1870. This may have been the first ironworks in the country to initiate wood-fired puddling. It was also the site of heavy forging of large shafts, locomotive tires, and wrought-iron cannon. Innovation, reinvestment, and dogged entrepreneurship did not assure success.

## ABBREVIATIONS:

CRM	= CRM: Cultural Resources Management, Avail: National Park Service, Cultural Resources Box 37127, Washington DC 20013-7127.
I&T	= American Heritage of Invention & Technology
PH	= Public Historian
R&LHS	= Railway & Locomotive Historical Society
RH	= Railroad History
T&C	= Technology & Culture
VR	= Vintage Rails

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# *IA in Dixie*

## Fall Tour 1999, Birmingham, Alabama November 3-7

This year's fall tour will take place in the heart of industrial Dixie—Birmingham. Capitalists founded this deep south city shortly after the Civil War and invested heavily in industries built to extract and process the region's vast fields of iron ore, coal, and limestone. Birmingham grew so quickly during the 1880s that it was known as the "Magic City" and became one of the largest iron-making towns in the country and the largest manufacturing center for cast-iron pipe in the world. Although the economy has changed dramatically over the past 30 years, the region still has a very active industrial community.

This year's tour, sponsored by Sloss Furnaces NHL, the University of Alabama at Birmingham, and the fledgling Southern Chapter of the SIA, will begin with a pre-tour, hands-on foundry workshop offered by Sloss. This nationally recognized iron melting program is a combination of historic processes, hand labor, and modern materials run primarily by metal artists. Participants will learn pattern making on Tuesday, then create molds during the day on Wednesday. The crew will then fire up the cupola during the opening-night reception on Wednesday and pour the molds made that day. This program is open to everyone whether you come with your own patterns or use one of those provided.

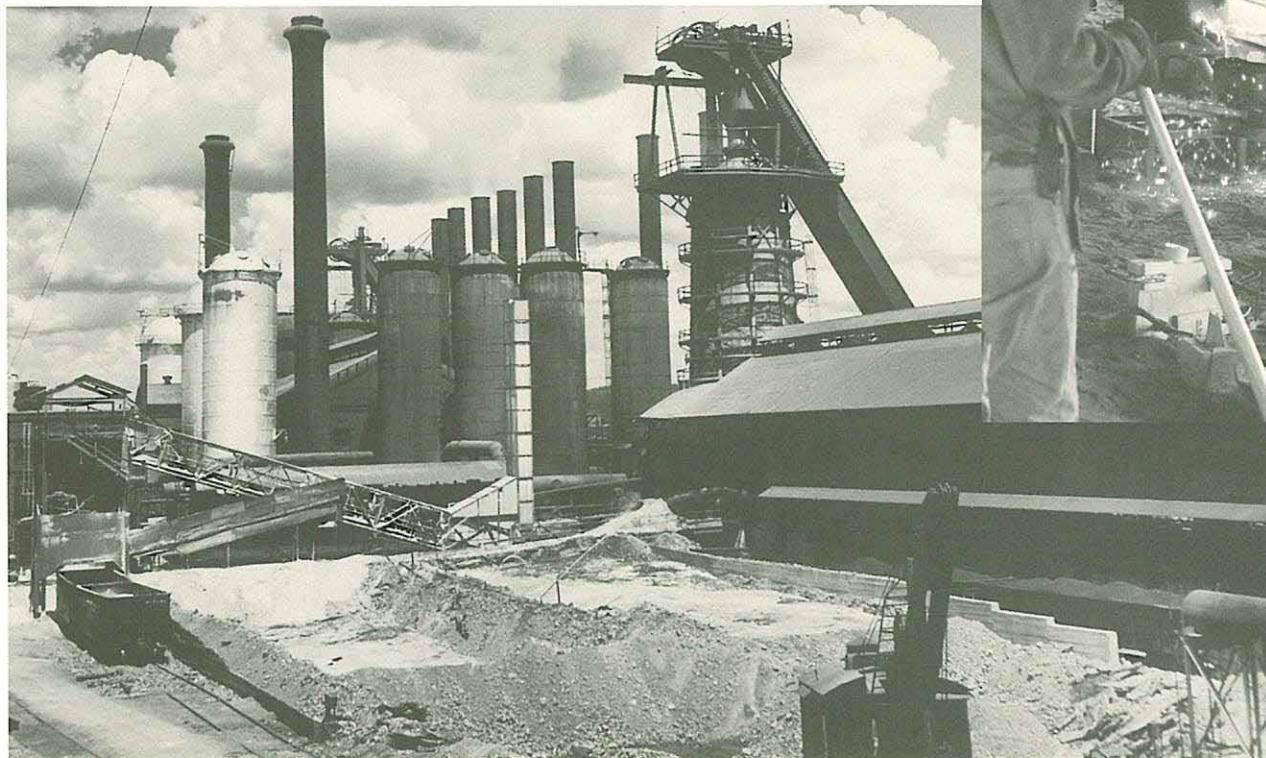
Over the three days of tours, we will visit the American Cast Iron Pipe Company (ACIPCO) to watch deLavaud centrifugal cast-iron pipe production. We are also planning to visit Empire Coke (ca. 1905), with possibly the oldest operating by-product coke ovens in the country. Other planned tour stops include the new Mercedes SUV assembly plant and U.S. Steel's No. 8 blast

furnace, seamless pipe mill, and rolling mills. The nearly brand-new Boral Brickworks, the Civil War Tannehill Furnace, and the West Blocton beehive coke oven will be on the tour, along with a behind-the-scenes look at the Alabama Theater with its Mighty Wurlitzer pipe organ. Rickwood Field, the oldest standing professional baseball park in the country, will be the setting for the Saturday evening banquet. Post-tour activities will include a guided walking tour of downtown Birmingham. A more rugged alternative tour will also be offered to abandoned mine sites along Red Mountain. Sunday afternoon will include a demonstration of a catalan forge at the historic Shelby Iron Works.

The historic Pickwick Hotel (205) 933-9555 in Birmingham's Five Points will be the tour headquarters. Five Points is home to many of Birmingham's best restaurants and night spots. Registration materials will be sent in late summer. Info: Bode Morin at (205) 918-0413; e-mail: [110751.2101@compuserve.com](mailto:110751.2101@compuserve.com), or Jack Bergstresser at (205) 934-4690; e-mail: [drblast@msn.com](mailto:drblast@msn.com).



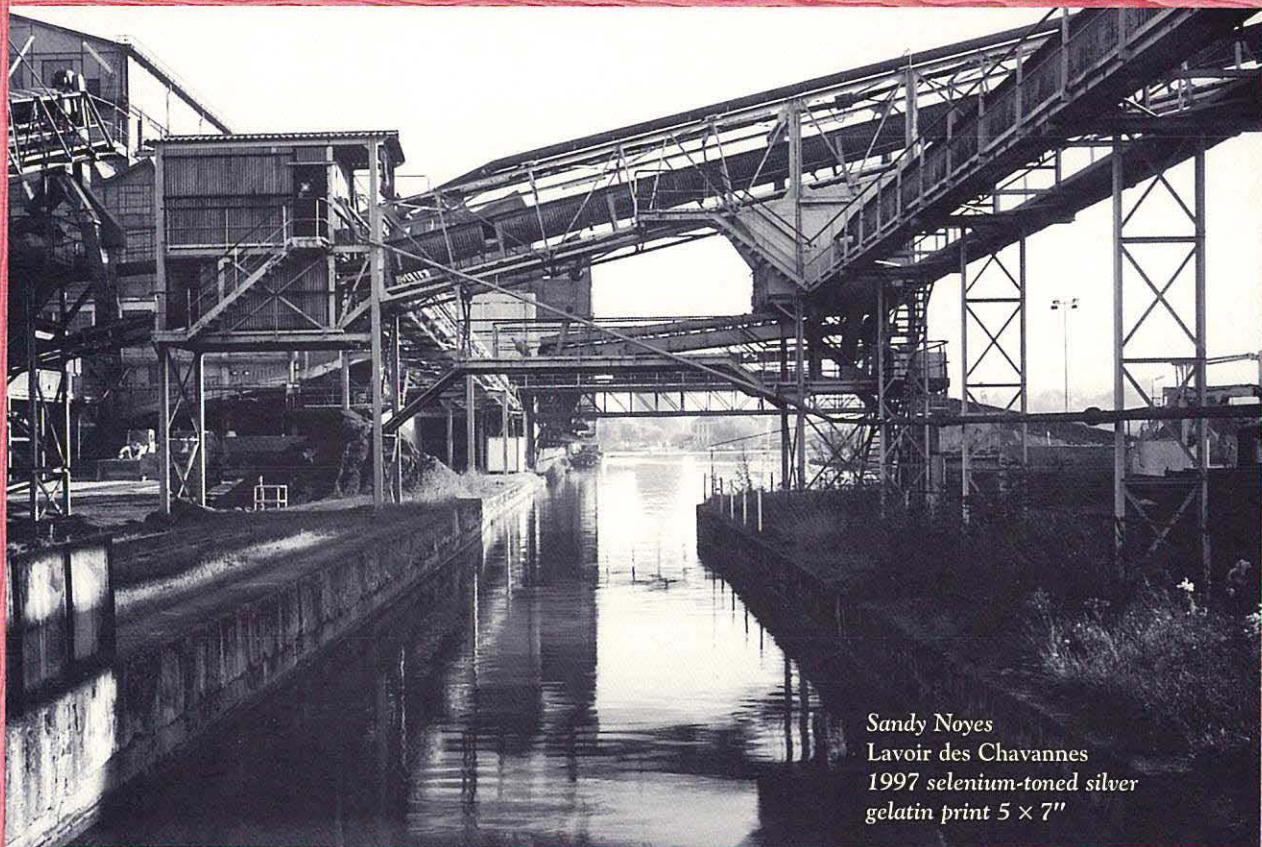
A recent pour at Sloss Furnaces NHL.



Sloss Furnaces in full operation, ca. 1945.

# IA in Art

*Lavoir des Chavannes* by Sandy Noyes



Sandy Noyes  
Lavoir des Chavannes  
1997 selenium-toned silver  
gelatin print 5 x 7"

**S**andy Noyes is part of a small, but persistent, group of contemporary photographers who have made their hardy specialty industrial archeology. Others include Joseph E. B. Elliott, Jet Lowe, and Gerald Weinstein [all SIA]. For the past 15 years, Noyes, a freelance photographer from the Albany, NY, area, has focused on recording industrial landscapes and the architecture that defines them, establishing himself as a skilled documenter of historic technology in the United States and abroad.

His portfolio is diverse and reflects his increasingly wide travels in search of intriguing subjects. Noyes has produced photo essays on slate companies in New York and Vermont, historic ironworks in Massachusetts, and steel and coke works at Duquesne and Clairton, PA. A visit to the West enabled him to explore copper and gold mining in Utah, including Kennecott's impressively scaled Bingham Canyon Mine near Salt Lake City. Given the large scale of his subject matter, it is not surprising that many of his projects continue over several seasons; it took him over three years to finish recording sugar factory ruins in St. John in the U.S. Virgin Islands. Sometimes his focus has been on individual machines, rather than the buildings which housed them. From the extensive collections of the American Precision Museum in Windsor, VT he has made handsome images of their historic lathes.

*Lavoir des Chavannes* (1997) pictures an early 20th-century French coal scrubber at Montceau-les-Mines. This small city, still a center of mining in Burgundy, is located in a region rich in IA artifacts (the

famed foundries and steelworks of Le Creusot are 20 minutes away). Geographically compact, Montceau and its environs can easily be traversed in half an hour, enabling Noyes to take advantage of shifting light conditions on multiple subjects throughout the day. Spending two weeks in the region, he produced nearly 60 negatives.

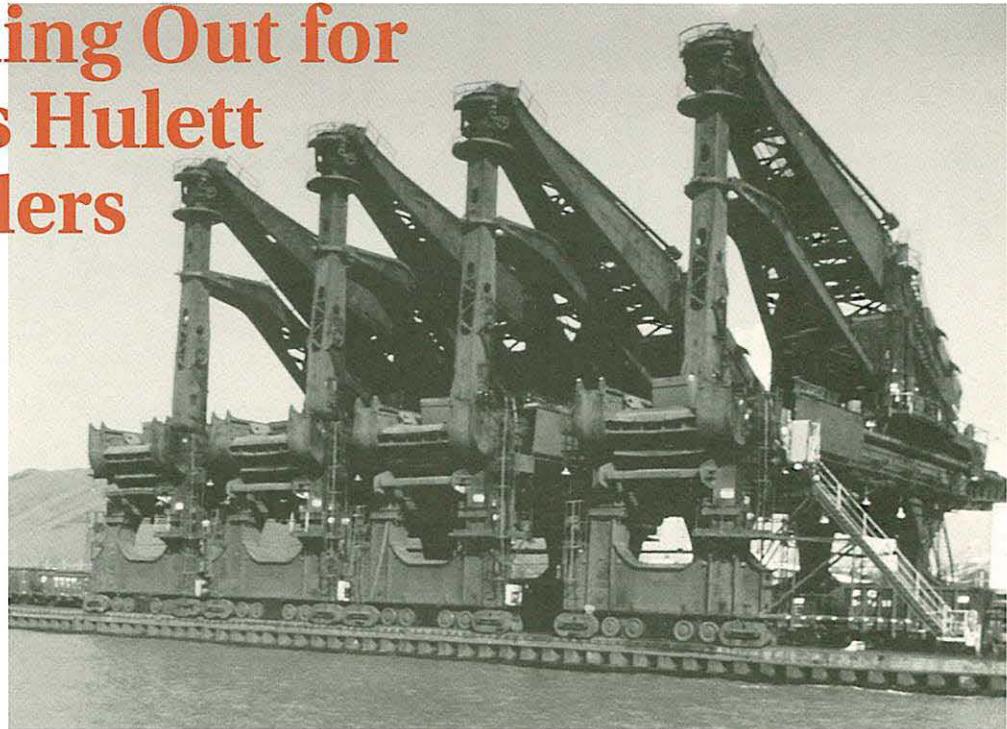
The enormous structure partially visible in Noyes' photograph houses the mechanical sifters and revolving separators that sort the raw material taken from the nearby open pit into three categories: rock used in road construction, and two types of coal, one for home and institutional use, the other for an electric generating plant a half mile away (*Les Centrales électriques de Lucy*, in service since 1921). Transport of material to the lavoir is accomplished by rail, and transport out is by barge, truck, or conveyor belt, depending on its intended use. Diagonally bridging the canal is a conveyor linking the scrubber to another building next door, where the coal is converted into charcoal briquettes. In the far background the administration buildings for the complex are visible. At the time it was built in 1923, the Montceau coal washer was one of the largest and most modern in the world, with a capacity of 1,000 tons per hour. The lavoir remains in operation, though the photograph cannot convey the omnipresent rumbling of the machinery. The image is documentary in impetus, though the fact that he was methodically recording the site for historical information freed Noyes to select this view suggested by his instincts as an artist.

*Continued on page 15*

# Time Running Out for Cleveland's Hulett Ore Unloaders

When the Cleveland-Cuyahoga County Port Authority purchased the historic C&P Ore Dock (NR, HAER) from Conrail in 1997, many here were optimistic that public ownership by a local agency signified hope for the preservation of Cleveland's monumental Hulett iron-ore unloaders [SIAN, Winter 1997]. That optimism, it turns out, was misplaced. A port master plan unveiled early last year was silent of the future of the 10-story-tall machines. At a public hearing on the plan, a standing-room-only crowd addressed the omission, making it abundantly clear that preservation of the Huletts, among the last survivors of a technology that once dotted the Lower Lakes from Gary to Buffalo, was a high civic priority. Last August, the port reluctantly participated in ceremonies sponsored by the American Society of Mechanical Engineers honoring the Hulett iron-ore unloaders as a Historical Mechanical Engineering Landmark. More than 500 turned out for a sunset cruise to the C&P Dock, where a bronze plaque was presented to port maritime director Stephen Pfeiffer. Barely three months later, the port board of directors approved a plan to increase dock capacity that, it claimed, required removal of the Huletts. To "mitigate" the loss, the port proposed to save "a key portion" of one Hulett at an as-yet-undetermined location. In December, the port authority applied to the Cleveland Landmarks Commission for permission to remove all four Huletts and other buildings and structures on the site. Preservationists turned out en masse to testify against the port's application. The commission turned down the port's request, delaying demolition for six months but starting the clock. The port may return with its request in early June, at which time the commission can either approve demolition or impose a second six-month delay, following which the port will be free to proceed with demolition.

As the port bides its time, keeping one eye on the price of scrap, a "Hulett subcommittee" of the Cleveland Landmarks Commission has been conducting a series of special meetings intended to hear the concerns of interested parties and mediate a solution. Sadly, instead of challenging the port's insistence that the Huletts must go, the meetings have turned to discussions about where to move one Hulett. Reviewing various options for relocation, one subcommittee member noted, straight faced, that at some potential sites the salvaged Hulett would have to be positioned with its bucket leg in the down position owing to proximity of the lakefront airport! Believing that history and commerce need not be mutually exclusive, the grass-roots Committee to Save Cleveland's Huletts continues to advocate the preservation of all four Huletts in their historic lakeside setting. Anything less



Hulett ore unloaders in repose, as seen at the 1986 SIA Annual Conference in Cleveland.

Pat Malone photo

would compromise the integrity of this stunning landmark of the industrial and maritime heritage of Cleveland and the Great Lakes. The committee is conducting a petition and letter writing campaign, and has worked to secure media coverage of the issue. In February, National Public Radio's All Things Considered ran a short feature, "Saving the Huletts," by WNYC reporter Amy Eddings. (The program can be downloaded from the NPR archives at <http://www.npr.org> by clicking on ATC archives for Feb. 24.) In the meantime, the Hulett ore unloaders have been selected by the National Trust for Historic Preservation as a finalist for the trust's 1999 list of America's 11 Most Endangered Historic Places. Inclusion on that prestigious list would help raise the profile of this critical preservation issue. Unfortunately, the winners will not be announced until mid-June, by which time it may be too late to matter. Many here fear that the Cleveland Landmarks Commission will forego another six-month stay and instead approve a deal with the port to save one Hulett and sacrifice the rest. SIA members can help by demonstrating that there is a national and even international constituency for preservation of the Hulett ore unloaders. Please write a letter supporting preservation of the Huletts to: The Honorable Michael R. White, Mayor of Cleveland, City Hall, 601 Lakeside Ave., Cleveland, OH 44114; fax (216) 664-2815. (Mayor White controls the majority of appointments to the port board, as well as the Cleveland Landmarks Commission.) Send a copy of your letter to Gary Failor, Executive Director, Cleveland-Cuyahoga County Port Authority, 101 Erieview Ave., Cleveland, OH 44114; fax (216) 241-8016. Send a blind copy to Carol Poh Miller, c/o Committee to Save Cleveland's Huletts, 17903 Rosecliff Rd., Cleveland, OH 44119.

C. P. M.

# Victor C. Darnell Dies

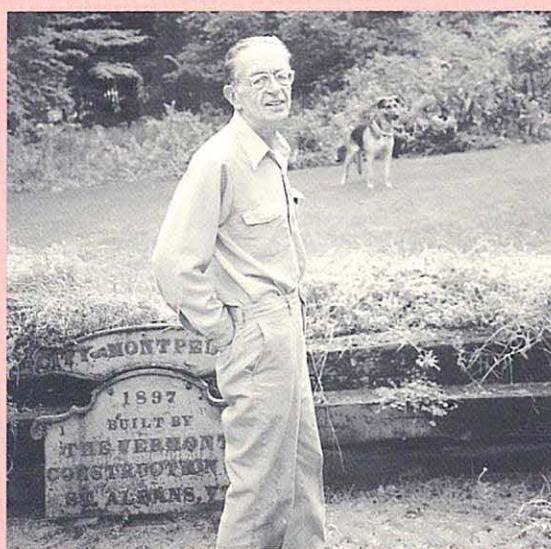
Nothing is sadder than the loss of a dear friend and fellow believer in a common cause. Victor died at age 77 on January 4th in Kensington, Conn., his long-time residence. His abiding interest in industrial archeology—particularly the evolution of the iron and steel truss bridge—arose quite naturally from his 32-year career at the Berlin (Conn.) Steel Construction Co. where he was Chief and Design Engineer (BS in CE, MIT, 1943). He retired in 1977. Berlin, as many of you will know, was a direct descendant of the Berlin Iron Bridge Co., known as erectors of (among other bridges and structures) scores of their trademark lenticular- (aka “parabolic”) truss road bridges, from the 1880s well into this century. Many of these distinctive spans—for which Victor had a particular fondness—remain to be seen throughout New England and New York.

Although clearly simmering for some time, Victor's active interest in metal bridges was sparked in the early 70s during a holiday trip in the Adirondacks when directed by a local public-works official to a ferrousness of early iron bridges in the area. The light went on and henceforth his life was divided among his family, his many civic good works in nearby New Britain, and bridges. This led to a number of articles in the Society's publications and most notably, Occasional Publication No. 4 (1984): *Directory of American Bridge-Building Companies, 1840-1900*. This tour de force listed for the first time all firms (and some individuals) known to have built bridges principally of metal during this period. It contained as well an analysis of the capacities of the largest firms at the turn of the century, and detailed accounts of several of the major builders. Fifteen years along it remains a brilliant job of research and a vital resource for bridge historians. As well as his literary contributions to the Society, Victor was at all times a staunch and vital supporter of its various works.

We extend to Victor's family—in particular his wife Jane and daughter Polly whom many members know—our deepest regrets at the loss of this fine man.

R.M.V.

Polly Darnell photo



Victor C. Darnell in his backyard with a builder's plate from a demolished bridge.

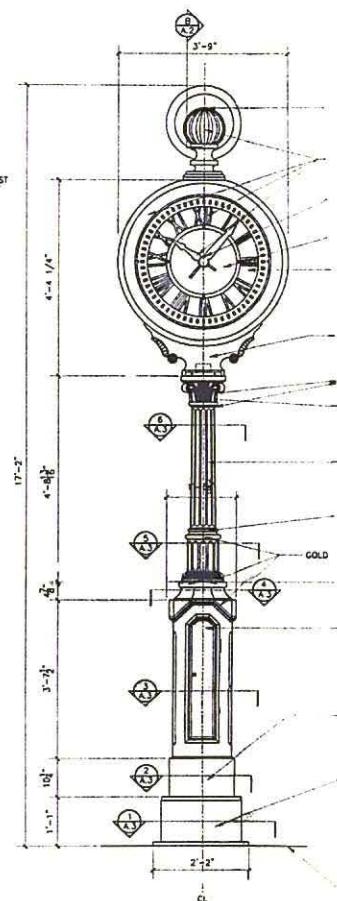
# Yorkville Clock Gets A Facelift

On Nov. 20, 1998, the century-old cast-iron sidewalk clock at 1501 Third Ave. in New York City was lifted by a portable crane, laid gently on the pavement, and within two hours had been wrapped and crated in two parts and sent on its way to a Utah foundry for restoration.

This 17-foot tall clock is one of the handful of such turn-of-the-century timepieces remaining in the city. It was designated an official city landmark on August 25, 1981. The old clock, in the shadow of the Third Avenue elevated railroad, was a community favorite from the day in 1898 when Adolph Stern had it set in front of his jewelry store. The clock's two faces simulate a giant pocket watch. A memorable 1945 motion picture, “The Lost Weekend,” shows an inebriated Ray Milland clinging to the clock as an elevated train rumbles overhead in the area that is called Yorkville by some and the Upper East Side by others.

A newly formed organization, Neighbors Restoring the Historic Yorkville Clock, established with Franny Eberhart as chair and Margot Gayle [SIA] as vice chair, has launched a campaign to raise \$18,000 to pay for a total restoration by Historical Arts and Casting, Inc., in Salt Lake City. The Baird family, which owns this large foundry, has restored cast-iron bridges in New York's Central Park and handled the disassembly and re-erection of the Fava Fruit Company's iron facades in Baltimore.

The clock's deplorable condition made the need for major repairs evident. It ran sporadically, the two faces often read different times, one face was cracked, and the iron pedestal, defaced by graffiti, showed patches of rust where paint had peeled away. The reinstallation of the clock should take place this spring. Info: Margot Gayle, 235 E. 87th St., Apt. 6-C, New York, NY 10128; (212) 369-6004. ■



This shop drawing of the Yorkville Clock was made by Historical Arts and Casting, Inc., in preparation for the restoration of the century-old sidewalk clock. Courtesy of Margot Gayle

## NOTES & QUERIES

**Shell Oil Company Foundation Donates \$500,000 to Digitize HAER Collection.** In November, the Library of Congress received a half-million-dollar grant from Shell to bring the Historic American Engineering Record collection of more than 183,000 photographs, 52,000 drawings, and 115,000 pages of history to the World Wide Web. The Shell grant will go toward further digitizing the collection, which is displayed on the Library's Web site: [www.loc.gov](http://www.loc.gov). The HAER collection was chosen by Shell and the Library because of its appeal both to professional researchers and primary and secondary educators. Shell felt that the HAER collection would have a stronger impact and reach more students throughout the country by way of the Internet. HAER and its companion collection, the Historic American Buildings Survey (HABS), are operated as cooperative ventures between the public and private sectors. The National Park Service administers the surveys. Documentary records are transferred to the Library. Each year, HAER teams of historians, engineers, architects, and volunteers survey historic engineering and industrial sites throughout the United States. Many SIA members have participated in HAER projects. Soon all of their work will be available on the Web.

**The Mifflinburg [PA] Buggy Museum** is seeking any information that would help them locate a documentary film that includes footage taken at the museum sometime between 1979 and 1983. The filmmakers interviewed Norman Heiss, who was the son of coachmaker William A. Heiss. It is believed that the interview was for a PBS-style documentary titled *Pennsylvania*. The museum is the site of the Heiss Coachworks, established in 1883, for the manufacture of horse-drawn carriages. The works closed in 1920 and remained virtually untouched for over 50 years until it was opened as a museum in 1979. Mifflinburg was the home of over 75 independent buggy manufacturers from 1860 to 1920, earning it the nickname "Buggy Town." Contact: Jim Remar, MBM, Box 86, Mifflinburg, PA 17844; (717) 966-1355; fax 966-9231; e-mail: [buggymus@csrlink.net](mailto:buggymus@csrlink.net).

**Info Sought on Lesser-Known NY Bridges and Builders.** For NYSDOT's historic bridge inventory, SIA members are encouraged to contribute their knowledge of the state's lesser-known bridge engineers, bridge designers, and trends in bridge engineering and design for a comprehensive statewide historic context. Over the next three years, NYSDOT will conduct an inventory of all state and locally owned bridges to identify those with historic value. Info: Amy Squitieri, Mead & Hunt, Inc., 1-888-364-7272.

**Public Works Historical Society** will be publishing at least two essays in public works history beginning in 1999. The essays will be on historical topics of interest to public works managers and engineers, as well as to historians. The series will include historical papers on public works topics, such as water treatment and distribution, sewers and wastewater treatment, flood control and drainage, solid waste collection and disposal, underground utilities, streets and highways, public buildings, waterways, planning, and urban technology. Completed manuscripts can be 50 to 150 pages in length; they should be well-documented but not written exclusively for an academic audience. They should be original, i.e., not published before in full and final form. Potential authors should submit an abstract of no more than 300 words to: Howard Rosen, Dept. of Engineering Professional Development, Univ. of Wisconsin-Madison, 432 N. Lake St., Madison, WI 53706; e-mail: [rosen@engr.wisc.edu](mailto:rosen@engr.wisc.edu).

## IA in Art

*Continued from page 12*

Using a vantage point at the south end of the Bassin, a body of water used by barges en route to and from the Canal du Centre, the formal compositional techniques Noyes has employed in *Lavoir des Chavannes* derive from deeply rooted art historical traditions. Working in full sun just after dawn, he captured luminescent light favored by late-19th-century French painters. The emphatically functional nature of the buildings whose structural elements are so frankly exposed provides a natural compositional framework. Preferring a perspective with a single vanishing point—here just left of center—Noyes' logical visual organization produces a harmonious image. Classic in its serenity, deep mysterious shadows dominate the lower right quarter, and the edge of a pier juts into the water in the foreground, drawing the viewer into the middle and left side of the composition.

Noyes has thoroughly immersed his American aesthetic sensibilities in the spirit of 19th-century French art. Cameramen Edouard-Denis Baldus and Charles Marville recorded the great public works projects of the 1850s and 1860s. The placid reflective calm of *Lavoir des Chavannes* is also reminiscent of works like *River Scene, France* (1858) by Camille Silvy and the magisterial yet intimate garden views taken by Eugéne Atget at the turn of the 20th century. In painting, Impressionist and Post-Impressionist antecedents may be found in the austere Pointillist water scenes of Georges Seurat and Camille Pissarro's coal-hazed views of Rouen. In his *Les Pont de l'Europe* (1876), Gustave Caillebotte uses the sharply angled girders of a modern bridge as a powerful compositional device, echoing the Montceau conveyors.

Noyes uses a large-format Swiss Arca view camera, the specific technical capabilities of which are fundamental to his highly objective aesthetic. He aims to intrude little on the scene he shoots, leaving as much as possible to be revealed by his instrument and subject. In this way, his creative role is analogous to a window through which reality is viewed, rather than a mirror reflecting the individual sensibilities of the artist. Ideally suited for the photography of industrial architecture, with such a camera the artist can maintain great control over perspective, insuring an orderly image of considerable clarity. Noyes conveys a strong sense of the particular—in light, building style, and place—reclaiming a compelling evocation of the past. Informed by a sensibility that is rigorously archival, his work represents an intriguing interplay between the aesthetic and the factual. The realities of making an accurate transcription of what he sees imposes an objective standard on the photographer to render details without embellishment. Although Noyes is scientific in orientation, one hesitates to take him flatly at his word—"In IA photography subject matter is the entire subject"—for he is an alertly intelligent photographer, wanting his images to transcend mere documentation to create a resonant interpretation which will significantly enhance a viewer's appreciation of an industrial scene.

**AUTHOR:** Betsy Fahrlman, a professor of art history at Arizona State University, has had a long fascination with art and industry, beginning with research for her book, *John Ferguson Weir: The Labor of Art* (Univ. of Delaware Pr., 1997), which contains several chapters on his paintings of the West Point Foundry. She is here happily reviving an occasional column that she wrote for SIAN, 1986-1991. Readers are encouraged to suggest essay ideas, or submit their own. She may be reached electronically: [fahrlman@asu.edu](mailto:fahrlman@asu.edu). ■

## CALENDAR

### 1999

**June 3-6:** SIA Annual Conference, Savannah, GA. See article in this issue. Info: Mark Finlay, Dept. of History, Armstrong State Univ., Savannah, GA 31419; (912) 921-5642; e-mail: mark\_finlay@mailgate.armstrong.edu. Website: [www.hist.armstrong.edu/SIA/conference.htm](http://www.hist.armstrong.edu/SIA/conference.htm).

**June 13-17:** Assoc. of Living History, Farm and Agricultural Museums Annual Conference, Kansas City, MO. "Across the Wide Missouri: Crossroads & Cultures." Themes include changes in transportation and other technologies, and the role of Kansas City in the movement of goods between East and West. Info: Watkins Mill State Historic Site, 26600 Park RD N, Lawson, MO 64062. Website: [www.alhfam.org](http://www.alhfam.org).

**June 21-27:** Railway & Locomotive Historical Society, Annual Meeting, Sacramento, CA. Held jointly with the National Railway Historical Society and in conjunction with Railfair 1999. Info: Box 8289, San Jose, CA 95155-8289.

**September 7-10:** International Conference on Preservation of Engineering Heritage, Gdansk, Poland. Info: Conference Secretary, Waldemar Affelt, PEH\_GO 2000 Secretariat, Politechnika Gdanska, Wydział Budownictwa Ladowego, ul. Narutowicza 11/12, 80-952 Gdansk, Poland; tel: +48/58/347 2705, fax +48/58/347 2044, e-mail: [affew@pg.gda.pl](mailto:affew@pg.gda.pl); homepage: [www.pg.gda.pl/~pehgo2000](http://www.pg.gda.pl/~pehgo2000).

**Sept. 29-Oct. 2:** American Assoc. for State & Local History and Mid-Atlantic Assoc. of Museums Conference, Baltimore, MD. "Caring for Treasures at the Millennium." Info: AASLH, 530 Church St., Ste. 600, Nashville, TN 37219-2325; e-mail: [www.aaslh.org](http://www.aaslh.org).

**October 3-7:** Society for the History of Technology (SHOT) Annual Meeting, Detroit, MI. Info: SHOT, Dept. of History, Auburn Univ., Auburn, AL 36849. Website: [hfm.umd.umich.edu/tc/SHOT](http://hfm.umd.umich.edu/tc/SHOT).

**October 7-9:** Pioneer America Society, 31st Annual Conference, Washington, PA. "The Trans-Appalachian West." Saturday field trip will focus on the National Road in western PA. Info: Alexander T. Bobersky, Community Development Dept., 646 Tod Ave. NW, Warren, OH 44485; (330) 841-2595; fax, 841-2643.

**October 18-23:** World Congress of Conservation and Monumental Heritage, XII General Assembly, ICOMOS, Mexico. General paper sessions at various locales in Mexico. Issues related to conservation, heritage tourism, archeology, etc. Conservation of Industrial Architecture is a scheduled session. Info: Carlos Flores Marini, Coordinator-Mexico 99, Mazatlan 190 Col. Condesa, C. p. 06140, Mexico, D.F.; Tel. 515-1471, Fax 272-4128; e-mail: [icomosmex99@compuserve.com.mx](mailto:icomosmex99@compuserve.com.mx).

**October 20-23:** International Conference on Historic Bridges, Wheeling, WV. Info: Emory L. Kemp, Inst. for the History of Tech. & IA, 1535 Mileground, Morgantown, WV 26505; (304) 293-7169; fax 293-2449; e-mail: [Lsypolt@wvu.edu](mailto:Lsypolt@wvu.edu).

**November 3-7:** SIA Fall Tour, Birmingham, AL. See article in this issue. Info: Bode Morin, Sloss Furnaces NHL, Box 11781, Birmingham, AL 35202-1781; (205) 324-1911; fax 324-6758; e-mail: [110751.210@compuserve.com](mailto:110751.210@compuserve.com).

### 2000

**March 16-19:** American Society for Environmental History Annual Meeting, Tacoma, WA. *Into the Next Millennium: The Past and Promise of Environmental History*. Paper and session proposals requested (due July 15). Info: Mart Stewart, Dept. of History, Western Washington Univ., Bellingham, WA 98225-9056; (360) 650-3455; e-mail: [smar4@cc.wwu.edu](mailto:smar4@cc.wwu.edu).

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