

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

Volume 27

Summer 1998

Number 2

ALDRICH CHANGE BRIDGE *Documentation & Restoration*

The Aldrich Change Bridge in Macedon, NY, which collapsed into Ganargua Creek in January 1996 and was rescued by local residents a year later, will be the subject of a Historic American Engineering Record (HAER) recordation project this summer prior to restoration. Eric DeLony, Chief of HAER, believes the bridge is the oldest documented cast- and wrought-iron truss bridge in New York and one of the earliest surviving examples in the nation. DeLony, well known for his advocacy for historic bridges, has called the project "new, exciting, and grand." Local resident Jay Harding, coordinator of the Aldrich Change Bridge Committee, heads the restoration project.

The bridge was manufactured in 1858 in Waterford, NY, by John Hutchinson. Based on the design of Squire Whipple, the dean of American iron-truss bridge engineers, it originally was located over the old Erie Canal just north of the weighlock building in Rochester. In 1880, it was relocated over the canal on the Macedon-Palmyra town line after the existing wooden change bridge collapsed into the canal. The bridge then served as a crossing for mules and horses pulling boats to make the shift from the south towpath to the north as they approached Palmyra. A change bridge was not needed on the original Erie Canal at this location but, when the State widened the canal from 40 ft. to 70 ft., the canal waters came right up to the buildings in Palmyra and eliminated the original south towpath. Thus, the horses

and mules had to change to the north side of the canal in order to pass through the village. The bridge, also known as Crossover Bridge No. 35, served until 1915, when the State abandoned the old canal in favor of the expanded Barge Canal. A local farmer bought the bridge and moved it to his property to provide a crossing of Ganargua Creek.

As a result of community interest and volunteer support, the bridge was removed from the icy waters of the creek in January 1997 by Sessler Excavating & Wrecking Co. of Waterloo, NY, and is being stored at the Macedon Highway Dept. The owners have agreed to donate the bridge to the communities of Palmyra and Macedon, and plans have been prepared to restore the bridge and return it to its 1880 site over the canal in what is now a community park. Once returned, the bridge will become part of the NY State Heritage Trail system, following more than 360 miles of the old canal. The Palmyra-Macedon Towpath Trail will offer views of the bridge as it looked in 1880.

The estimated cost of restoration and site work is \$232,000. This includes \$202,000 for rehabilitation work and site improvements; \$22,000 in the value of labor, materials, and related services to salvage the bridge from the creek; and \$8,000 to document the bridge to HAER standards. Professor Bradley Wales and architectural students from the State University at Buffalo will

(continued on page 3)



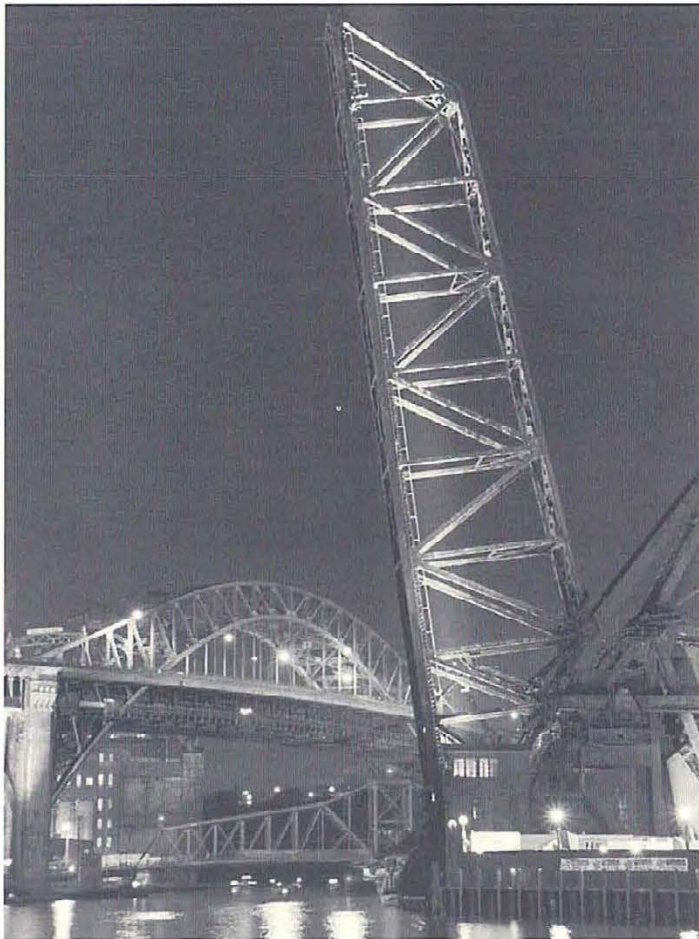
*Aldrich Change
Bridge, ca. 1900,
on the enlarged Erie
Canal at the
Palmyra-Macedon
town line.*

Cleveland, City of Bridges, Basks in a New Light

There are the greatest lot of bridges here you ever saw," a visitor to Cleveland scrawled on a postcard in 1905. The city's bridges still impress. (Those who attended the 1986 SIA annual conference will recall seeing no fewer than 22 of them during a boat cruise up the Cuyahoga River.) But now, thanks to a project designed to commemorate Cleveland's two-hundredth birthday, they have taken on a new, magical glow. The "City of Bridges" project has resulted in the permanent lighting of eight bridges in the city's Flats district, the broad floodplain of the Cuyahoga that separates the high plateaus of the city's east and west sides.

Conceived as a "legacy gift" to the people of Cleveland in honor of the city's bicentennial, celebrated in 1996, the award-winning lighting project was a complex undertaking that required the cooperation of Conrail, the City of Cleveland, Cuyahoga County, and private businesses. The Cleveland Bicentennial Commission administered the project, which was designed by Ross De Alessi of Ross De Alessi Lighting Design of Seattle, Washington.

Donn Notage, City of Cleveland photo



B&O Railroad Bridge #463, in its permanently raised position, punctuates the night sky. The lighting design simulates the approach of a "ghost train" every 30 minutes. In the background are the steel arch of the Detroit-Superior High-Level Bridge and the Center Street swing-span bridge.

Cleveland Public Power, a municipally owned electric utility, provided overall project management, while General Electric donated most of the 1,500 bulbs. More than two dozen different types, the majority mercury- and sodium-vapor, are employed, according to Cleveland Public Power engineer Ray O'Neill. Sunday through Thursday, the bridges are lighted from dusk to midnight; on weekends, the lights stay on until 2:00 A.M.

North to south, the eight bridges and their lighting designs are as follows:

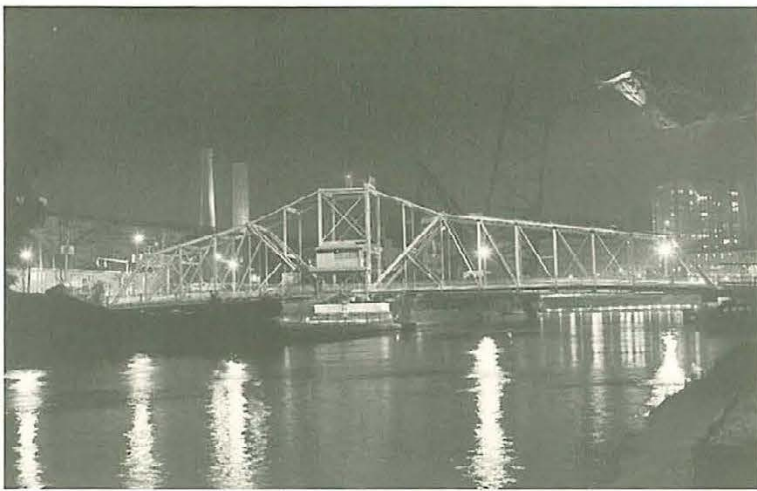
- **Conrail No. 1 Bridge (1947)** – This busy vertical-lift bridge near the mouth of the Cuyahoga River is bathed in a soft golden light.
- **Main Avenue High-Level Bridge (1939)** – The blue cantilever-truss spans of this 8,000-foot-long bridge, which carries vehicular traffic over industries, railroads, streets, and river, are illuminated by a series of simple up-lighted cascades.
- **Willow Avenue Bridge (1964)** – A multihued rainbow effect is projected onto the motor houses of this vertical-lift bridge, while the remainder of the span is bathed in gray light.
- **B&O Railroad Bridge #464 (1907)** – The lighting design for this bascule bridge, now inoperative and permanently in its raised position, is intended to re-create the effect of a forge. During a 15-minute event that takes place every half-hour, the bridge is bathed in light that changes from white to amber to red, the transformation moving gradually from base to tip of the 230-foot-long span.
- **B&O Railroad Bridge #463 (1956)** – The lighting design for this bascule bridge, also inoperative and permanently in its raised position, honors the steam locomotive by suggesting the passage of a "ghost" train. The bridge is foot-lighted with magenta and blue. On the half-hour, what appears to be an approaching train emerges from the earth, white light growing from inside the amber-lighted counterweight until the inside

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. 27,2 (Summer 1998), August 1998. 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.

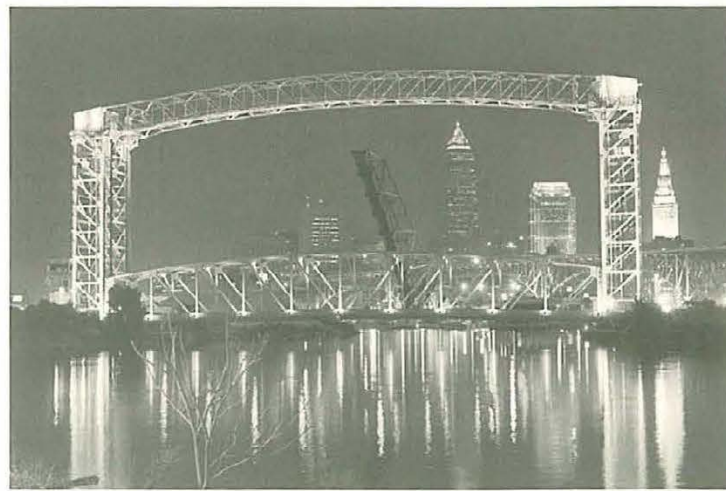
TO CONTACT THE EDITOR: Patrick Harshbarger, Editor, *SIA Newsletter*, Box 45, Toughkenamon, PA 19374-0045; (610) 268-3899; e-mail: phsianews@aol.com.



The Center Street Bridge reflects its new red glow in the Cuyahoga River.

of the magenta and blue roadway glows white. When the ghost train reaches the end of the trestle, a searchlight punctuates the sky. (The special effect required FAA approval.)

- **Center Street Bridge (1901)** – The city's last remaining swing bridge glows red.
- **Detroit-Superior High-Level Bridge (1917, HAER, NR)** – This massive double-deck span, 3,112 feet long, uses just under 1,000 bulbs, or two-thirds of the project's total. The 591-foot steel arch span is bathed in royal blue, while the reinforced-concrete spandrel arches of the approach spans glow bright white.



The Willow Avenue Bridge features a multihued rainbow effect on its motor houses.

- **Eagle Avenue Bridge (1931)** – Located directly across from Jacobs Field, the city's new professional baseball park, the first and oldest of the city's vertical-lift bridges glows blue-green.

The permanent lights were turned on for the first time in July 1996, although illumination of the Detroit-Superior span was delayed while the bridge was closed for a \$49-million renovation. Those lights were finally turned on early this year, completing the lighting project. In 1997, the colorful tribute to Cleveland's industrial and engineering heritage received an Award of Excellence from the International Association of Lighting Designers.

C. P. M.

ALDRICH CHANGE BRIDGE

Documentation & Restoration

(continued from page 1)

prepare the documentation this summer under the direction of Eric DeLony. Documentation will consist of measured drawings, large-format photographs, and a history of the bridge by engineering historian Bill Chamberlin [SIA]. Funding is from a HUD grant awarded as part of a county-wide application for improving the Erie Canal Corridor as a tourist magnet. It is hoped that the bridge and canal trail

will be an important tourist attraction for Wayne County. Information kiosks and interpretive signs will be installed at the site. Info: Jay Harding, 1735 Maple Ave., Palmyra, NY 14522; e-mail: jhnhfour@redsuspenders.com.

J.H.



Jay Harding photos.

Sessler Excavating & Wrecking rescued the bridge from the creek in about 3-1/2 hours, first with removal of the tubular upper chords and then the remaining members. Sessler donated its time, material, and expertise to the project.

Connecticut River Valley

1998 SIA FALL TOUR, SEPT. 30- OCT. 4

Industrialization of the region between Hartford, CT, and Springfield, MA, began in the late-18th century. Small arms, carpet, cotton, woolen and silk textiles, metal products, paper, automobiles and motorcycles, chemicals and plastics – all were made in this part of the Connecticut River Valley. The 1998 SIA Fall tour will offer a close-up look at the diversity of industry. We will see manufacturing technology that hasn't changed very much since the late-19th century and be able to contrast it with modern high-speed production methods.

The tour headquarters is the Harley Hotel and Conference Center in Enfield, CT. Wednesday pre-tour activities will center on a walk along the Windsor Locks Canal towpath. The evening will feature a reception hosted by the SIA's Southern New England Chapter.

Thursday's tours will include a visit to Hartford Clamp, which makes fine woodworkers' clamps on 1890s machinery, and to the Connecticut Trolley Museum to observe operations and examine antique signals, motors, and controls. Parsons Paper makes high-rag-content specialty and writing papers. We will see late-19th-century water-powered papermaking machinery and a bank of turbines used to generate electricity. A limited number will be able to visit Lego Systems to observe high-speed production of injection molded Lego blocks. Others will visit Hampden Paper, which has been in business since 1880 and concentrates on laminating and embossing. Following dinner on your own, a local historian will talk about cigar making and the valley's tobacco industry.

Friday's tour will start at Smith & Wesson, where we will observe the manufacture of firearms, police equipment, and bicycles. SIA members will have an opportunity to test-fire weapons in their new range and firearms training facility. Some participants will visit Warren Woolens to see integrated manufacturing of worsted, camels hair and vicuña fabrics on modern high-speed rapier looms. The tour will also make brief visits to the Indian Motorcycle Museum and the Springfield Armory Museum. We then will proceed to the Taylor &

Fenn Foundry. Started in 1834, the company originally made machine tools. Today, the business concentrates on making special alloy castings for turbines, compressors, pumps, valves and specialty machinery. Taylor & Fenn uses modern control technology, yet traditional green-sand foundry practice remains the heart of their business.

On Saturday we will visit Noble & Cooley, a family-owned company that has been making toy drums since 1879. Most of their equipment was designed by the company's founder and is still in use. Old Newgate Prison was an 18th-century prison and copper mine. Special interpretation for the SIA will focus on the geology of the mine. Another Saturday stop is the Holyoke Water Power Co., founded in the mid-19th century to sell industrial real estate and water rights in a planned industrial estate. An orientation program at the Holyoke Heritage Museum will be followed by a tour of Holyoke Dam, generating stations, antiquated electrical equipment, a fish "elevator," and a photogenic 19th-century industrial landscape. The tour banquet will be held at the New England Air Museum among historic aircraft.

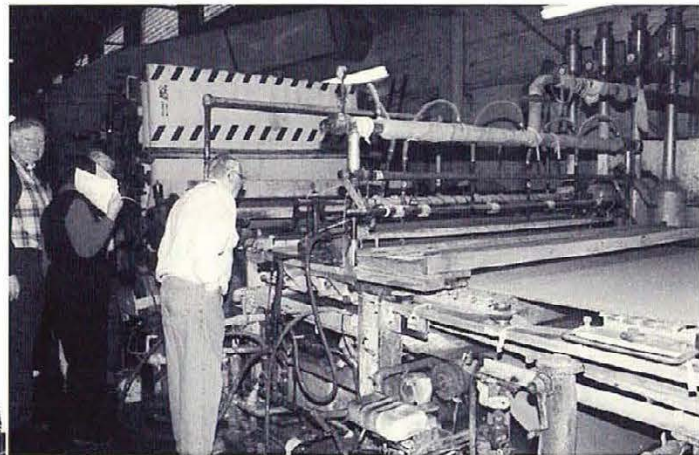
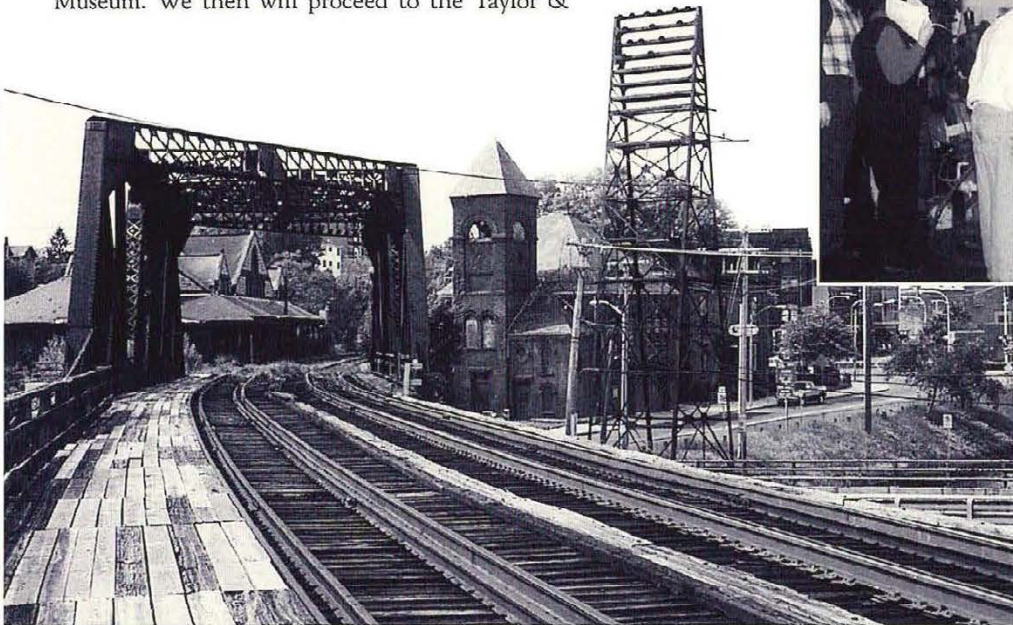
Sunday's activities include an all-day excursion trip on the route of the Farmington Canal and a number of post-tour, do-it-yourself driving excursions.

Brochures for the Fall Tour were mailed to SIA members in July. Info: Robert Stewart, 1230 Copper Hill Rd., West Suffield, CT 06093; (860) 668-2928; fax 668-9988; e-mail: 73071.3441@compuserve.com.

R. S.

Note: Fall Tour registration was full at the time of this press. Check with Bob Stewart at above address for information about tour availability before sending in registration form.

Bob Stewart photo



ABOVE: A Fordrinier paper machine set up for producing museum board at Parsons.

LEFT: A typical industrial landscape in Holyoke. The abandoned railroad station is framed by the bridge. The building at the center is headquarters of the Holyoke Water Power Co., and the first-level power canal is at the extreme lower right. The original power line transmission tower is no longer in use.

Whither Industrial Archeology A Symposium

Lowell, Massachusetts, November 12–14, 1998

Mark your calendars for November 12–14. That weekend the SIA will hold a special symposium called Whither Industrial Archeology. Cosponsored with HAER and the Lowell National Historic Park, the symposium will offer practitioners an opportunity to gather and reflect on where IA has been over the past quarter century, and on directions the field may take as we enter the 21st century.

With an emphasis on practice, the symposium is aimed at both professionals and amateurs who work in the field of industrial archeology. The formal presentations and the group discussions will benefit and be benefited by all those who work to identify, document, analyze, preserve, and interpret the material culture of our industrial society. The symposium is open to SIA members and non-members.

The SIA held a somewhat similar symposium at Martha's Vineyard in 1977. Because IA was fairly new then, that group of practitioners convened to hear and discuss papers analyzing what the field and its methods ought to be. The Society published ten of the papers in 1978 under the title *Industrial Archeology and the Human Sciences*. Since then, a lot of water has flowed under the bridge, through the turbine, or over the dam (depending on where your enthusiasms lie). It will serve our field well now to gather together again and reflect critically on the shape IA has taken in North America and to outline directions we might wish to take in the future.

The program committee has invited presentations from about twenty practitioners to address important issues facing
(continued on page 10)

PROGRAM

Thursday, November 12, 1998

Opening Session

- Reflections on the Past Quarter Century of IA in North America
EMORY KEMP, *West Virginia Univ.*
- Industrial Archeology's Place in Scholarship
MARIE NISSER, *Sweden*
- A Vision of Industrial Archeology in the 21st Century
MATT ROTH, *So. Calif. Automobile Club*

Friday, November 13, 1998

Morning Session: Compliance/Mitigation/Design

- **Speakers:**
LOUIS BERGERON, *TICCIH, France*
RICK GREENWOOD, *RI State Historic Preservation Office*
DUNCAN HAY, *National Park Service*
CHARLENE ROISE, *Hess, Roise & Assoc.*
ARNOLD ROOS, *Parks Canada*

– Break-out Sessions

Contracting: MICHAEL RABER
Preservation: KIM HOAGLAND

Afternoon Session: Interpretation

- **Speakers:**
EUSEBI CASANELLES, *Technical Museum, Barcelona, Spain*
ROBERT GORDON, *Yale Univ.*
DONALD HARDESTY, *Univ. of Nev., Reno*
THOMAS LEARY, *Industrial Research Assoc.*
BARRIE TRINDER, *United Kingdom*

– Break-out Sessions

Artifacts: LARRY LANKTON
Sites/Districts/Arcas: VANCE PACKARD

Saturday, November 14, 1998

Morning Session: Education in Industrial Archeology

- **Speakers:**
CHRISTOPHER ANDREAE, *Ontario*
HENRY CLEERE, *ICOMOS, Paris, France*
ERIC DELONY, *HAER*
JOHN LIGHT, *Parks Canada*
PAT MARTIN, *Michigan Tech*
MARILYN PALMER, *Leicester Univ., UK.*

– Break-out Sessions

Reaching beyond the Academy: ED RUTSCH
Breaking Barriers within the Academy: SANDY NORMAN

Afternoon Session: New Directions in Industrial Archeology

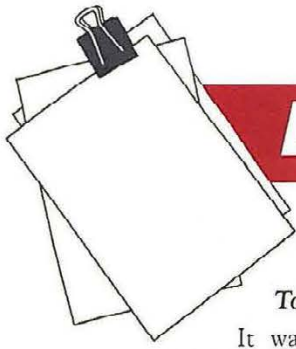
- **Speakers:**
LARRY GROSS, *Univ. of Lowell*
PAT MALONE, *Brown Univ.*
JUDY MCGAW, *Portland, OR*
FRED QUIVIK, *Froid, MT*

– Comments:

The Audience, facilitated by JOHN LIGHT, *Parks Canada*

Closing Banquet:

An Assessment of the Symposium
CHARLES K. HYDE, *Wayne State Univ.*



Letters to the Editor

Cleveland's Hulett's

To the Editor:

It was good to learn of the better survival prospects for Cleveland's Hulett ore unloaders in the Winter 1997 issue ("Cleveland's Hulett's Still Standing Tall," by Carol Poh Miller). In one respect, however, the article gives a misleading impression about the loss of railroad industrial artifacts in this country. The reference is to "the railroads' penchant for demolishing and discarding their IA patrimony."

State and local property tax collectors just love railroads, which must pay property taxes on the entire array of infrastructure they possess. This is different from their principal competitors, trucking and barges, which don't own – and therefore don't pay property taxes on the bulk of facilities their business requires. The highway and waterway ownership mostly resides in property-tax exempt government. To be sure, trucks and barges pay fuel and certain user fees but these costs aren't nearly so heavy as if they were directly paying property taxes *plus* maintenance and replacement *plus* capital investment as do railroads.

In today's business world, railroads have little choice but to eliminate infrastructure which has become irrelevant to their conduct of business. This includes stations, signal towers, certain yards and sidings, and facilities, such as the Hulett's, which serve customers they either don't have anymore or whose operations are conducted differently (self-unloading vessels). This is no different than most commercial enterprises, except that railroads, as common carriers, are too often viewed as having a unique public obligation.

The acceptance of the Hulett's by Cleveland-area governmental agencies parallels the "saving" of local depots and other unused railroad facilities in many parts of the country. Some may view this as an unwarranted aspect of government ("wasting public money") but it's truly a fund or lose situation. Perhaps some special tax exemptions for such rail facilities could be provided in law, but that would create new and potentially severe inequities. (Historic preservation has, unfortunately, proved burdensome for owners of other kinds of properties by increasing their costs and/or tying their hands.) I'm certainly not arguing against historic preservation, but from an economic standpoint, this is one "act" we clearly don't have "together" yet. Perhaps SIA can at some point in the future initiate some public policy discussion aimed at better addressing the entire preservation question.

In any event,... I sympathize with the author's concern about loss of railroad IA patrimony but don't think railroads should be

cast in an unfair light. They, too, must survive in our modern, intensely competitive world.

James L. Martin [SIA], Fresno, CA

Carol Poh Miller responds:

Mr. Martin's points are well taken. However, I must correct the misimpression he leaves that the Hulett ore unloaders have somehow been "saved" because of their "acceptance... by Cleveland-area governmental agencies." Nothing could be further from the truth.

The Hulett's have not been saved. They happen still to be standing on a parcel of land – a working ore dock – purchased from Conrail by the Cleveland-Cuyahoga County Port Authority. That transaction mercifully took them out of the hands of Conrail, but the fact remains that the Port Authority, if it had its druthers, would prefer to clear the site. Fortunately, it must deal with the twin realities that the dock, including the Hulett's, is a designated Cleveland landmark; and that there is a growing local and even national constituency for the Hulett's. Unlike Conrail, a public agency must take some account of public opinion. (Ironically, a recent history of the Port Authority, *Cleveland's Harbor* by Jay C. Ehle, features Hulett's, front and back, on the dust jacket!)

So, no, the battle is nowhere near over. This, in fact, is the critical moment, and SIA members concerned about preservation of the Hulett's are encouraged to continue their advocacy by writing: Sterling E. Glover, Chairman, Cleveland-Cuyahoga County Port Authority, 101 Erieside Ave., Cleveland, OH 44114-1095. Please send a *blind* copy of your letter to me c/o Committee to Save Cleveland's Hulett's, 17903 Rosecliff Rd., Cleveland, OH 44119-1347.

Letter to America

From Mark Watson, SIA Scotland Study Tour Leader

(See SIAN 27,1 Spring 1998)

Greetings from Scotland! I very much enjoyed meeting those of you who crossed the Atlantic in September. It was an excellent chance for me to get to know Scotland better, and look at the place from your perspective.

Since the study tour, the expected closure was announced of Alloa Brewery (est. 1810.) The site of Abbey Brewery, Edinburgh, has been identified as the controversial location for Scotland's parliament. The development of a shopping complex at Dundee Docks awaits determination. There are applications in to demolish the large sugar warehouse at James Watt Dock in Greenock and Broughty Ferry Railway Station (1838). One of the concrete winder towers at Monktonhall Colliery has been blown up.

On the positive side, the coal washer at the Scottish Mining Museum and the Social History displays at Verdant Works, Dundee, have now opened. The conversion of the Luma Lightbulb Factory, Glasgow (1939), is garnering awards. Look out for the TICCIH visit to Scotland in 2000, if you don't come back before then!

As so many of you asked me, the book, "Jute and Flax Mills in Dundee" by Mark Watson (224 pp., illus., £15.50) is available from Christine Barker, Hutton Press Ltd, the Old Manse, Queen St., Tayport, Fife DD6 9NS, Scotland UK.

I hope to get across the pond sometime; perhaps the Fall Tour? Regards.

1998 SIA Election Results

The results of the SIA officers election were announced at the Annual Business Meeting, June 6, in Indianapolis. Elected Vice-President for a term of two years was Carol Poh Miller. Elected to the Board of Directors for terms of three years were Gray Fitzsimons and Bierce Riley. Elected to the Nominations Committee for a term of three years was David Shayt.

A full review of the Annual Conference will appear in the Fall issue of SIAN. ■



SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

PUBLICATIONS OF INTEREST

A Supplement to Vol. 27, No. 2

Summer 1998

COMPILED BY

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

GENERAL STUDIES

- Ruth Schwartz Cowan. **A Social History of American Technology.** Oxford Univ. Pr., 1997. 352 pp., illus. \$19.95 paper/\$47 cloth. Survey from the tools used by earliest native inhabitants to the technological systems of today.
- **Infiltration.** This occasional publication features the illicit IA escapades of a 23-yr.-old who enjoys sneaking behind the scenes of subways, abandoned buildings, amusement parks, industrial sites, and museums and science centers. Includes his tips on how to get past rent-a-cops, security cameras, and into off-limit areas. The wonderful feeling that you're in on the secret workings of a city, or have discovered a non-public area that few people have ever paid any attention, may be familiar to some of our more wayward SIA members. Avail: Box 66069, Towne Centre PO, Pickering, Ontario, L1V 6P7. Website: www.infiltration.org/theory.htm. \$2/issue.
- Robert Kanigel. **The One Best Way: Frederick Winslow Taylor and the Enigma of Efficiency.** Viking, 1997. 675 pp., illus., \$34.95. New biography of the father of scientific management reinterprets his life and his contributions to industry, and recreates the gritty world of steam and steel that influenced his thinking.
- Daniel Nelson. **Farm and Factory: Workers in the Midwest, 1880-1990.** Argues that the "essential feature of the region's labor history was the sustained, simultaneous growth of agriculture and industry, a feature that produced a notable pattern of individual mobility and that left a distinctive and inescapable heritage." Suggests that a large part of the blame for the demise of the area's industry lies with the improvements enjoyed by workers and achieved by big labor. Extensive coverage of immigrant, female, and black workers. Rev.: *Minnesota History*, 56 (Spr. 1998), pp. 46-7.
- John R. Pannabecker. **Representing Mechanical Arts in Diderot's Encyclopédie.** *T&C* (Jan. 1998), pp. 33-73. A reinterpretation of the famous mid-18th-cen. work focusing on its many contributors and their differing approaches to interpreting and representing technology in pictorial form.
- **Partners in Tourism: Culture and Commerce.** 1997. 34 pp., illus. \$14. AAM Order No. 242. Summary of regional cultural tourism forums held in 1996-97. Highlights best practices in building partnerships between the culture and tourism industries. **Partnerships for Prosperity: Museums and Economic Development.** 1997. 144 pp. \$25. AAM Order No. 233. Practical advice for museums seeking collaboration with business and government. Of general interest to historic industrial sites and museums. Avail: American Association of Museums, Box 33399, Washington, D.C. 20033; (202) 289-1818.
- Henry Petroski. **Remaking the World: Adventures in Engineering.** Knopf (New York), 1997. 239 pp. \$24. This book profiles the creative minds behind some of the world's most influential structures and inventions such as the steam engine, the Panama Canal, the Hoover Dam, and the Petronas Towers.
- **Proceedings of the 1994 TICCIH/CSIH Conference.** \$15 US. Held in Montreal and Ottawa, the 1994 conference was the first international conference on the topic of deindustrialization and industrial heritage. The proceedings have just been released. There are articles that show examples of deindustrialization in Europe, Canada, US, and South America. Avail: Louise Trottier, Curator, National Museum of Science and Technology, Box 9724, Station T, Ottawa, ON K1G 5A3; (613) 991-6705; e-mail: ltrottier@nmstc.ca.
- Ruth Rosenberg-Naparsteck and Edward P. Curtis, Jr. **Runnin' Crazy: A Portrait of the Genesee River.** The Donning Co. (Virginia Beach, VA), 1996. 192 pp., photos, maps. \$39.95. Coffee-table book portrays history of river from the foothills of the Alleghenies to its mouth on Lake Ontario. Chapters cover lumbering, bridges, and industry, with an emphasis on the industrialization of Rochester, NY. Rev: *PH* 20 (1998), p. 61.
- Philip Scranton. **Endless Novelty: Specialty Production and American Industrialization.** Princeton Univ. Pr., 1998. 415 pp., illus. \$39.50. Focuses on furniture, jewelry, machine tools, and electrical equipment, made to order, and the effect they had on the creation of regional economies of great scope and diversity (even though these specialty industries didn't use mass-production techniques, traditionally considered the hallmark of American industrialization).
- Elizabeth Bradford Smith and Michael Wolfe, eds. **Technology and Resource Use in Medieval Europe: Cathedrals, Mills and Mines.** Ashgate (Old Post Road, Brookfield, VT 05036-9704; 1-800-535-9544). 224 pp., 53 b/w illus. \$72.95. Essays dispel the regrettable public misperception that medieval people somehow had to toil in a world bereft of technical innovation. Explores building construction, manufacture, and metalurgy shaped by broader forces of culture, social identity, political ambition, and the local environment.
- Edward W. Stevens, Jr. **The Grammar of the Machine: Technical Literacy and Early Industrial Expansion in the United States.** Yale Univ. Pr., 1995. 210 pp., fig., tables. \$27.50.

Overview of antebellum technical education requiring hands-on facility with machines and materials and basic competence in science and mathematics. Rev: T&C (Apr. 1998), p. 299.

- **The Trans-Mississippi West, 1804-1912: A Guide to Federal Records for the Territorial Period.** National Archives Trust Fund (NWCP, Dept. 810, Box 100793, Atlanta, GA 30384), 1998. Five-volume set identifies and describes records in the National Archives that are associated with the American West. Of particular IA interest are *Part III: A Guide to Records of the Department of Agriculture for the Territorial Period*, describing records of the U. S. Forest Service and activities related to road building, ranching, and lumbering; and *Part IV: A Guide to Records of the Department of the Interior for the Territorial Period*, describing records related to railroads, reclamation projects, and mines.

RAILROADS

- Michael M. Bartles. **Missouri Pacific: River and Prairie Rails.** South Platte Pr. (Box 163, David City, NE 68632), \$56.95. 100 years of service in Nebraska including history of depots, branch lines, and abandonments. Rev: VR (July/Aug. 1998), p. 103.
- Peter D. Barron. **The Altoona Railroaders Museum.** VR (May/June 1998), p. 41. New 45,000 sq. ft. interpretive facility, built in a renovated Pennsylvania RR office building.
- Peter Burman and Michael Stratton, eds. **Conserving the Railway Heritage.** E & FN Spon (Cheriton House, North Way, Andover, Hants, SP10 5BE, England), 1996. 244 pp. £29.95. Case studies in British railway preservation and discussion of priorities and best practice for conservation of railway structures and architecture. Aimed at railway historians, curators, and planners.
- Wayne Cline. **Alabama Railroads.** Univ. of Alabama Pr. (Tuscaloosa), 1997. 315 pp., illus., bibliog. \$39.95. Comprehensive history of the state's railroads. Rev: RH (Spring 1998), p. 156.
- **Connecticut DOT Upgrades Historic Railroad Station.** SIA *New England Chapters Newsletter* v. 18,1 (1998), pp. 10-11. New Canaan Railroad Station (1868) upgraded to standards of Americans with Disabilities Act (ADA) while maintaining historic character.
- James R. Fair. **The Louisiana & Arkansas Railway.** Railroads in America Series. Northern Illinois Univ. Pr. (DeKalb), 1998. 176 pp., illus., \$47.95. Expansion of line from New Orleans to Dallas.
- **Gallup, New Mexico, Depot Renovation.** R&LHS *Newsletter* (Winter 1998), p. 5. Restoration of Santa Fe RR depot that served as a gateway to the Navajo Nation.
- John Gruber. **Family Ties: Railroading Gets in Your Blood.** VR (May/June 1998), pp. 34-40. Role of family tradition and pride in railroad employment practices.
- Bill Hosokawa. **Old Man Thunder: Father of the Bullet Train.** Sogo Way (1099 18th St., Ste. 2020, Denver CO 80202; phone: 303-292-3001), 1997. 272 pp., photos. \$30. Authorized biography of Shinji Sogo, the president of the Japanese National Rwy. who committed Japan to the Bullet Train project, by a Japanese-American journalist. Also inc. coverage of Sogo's earlier job as director of the South Manchuria Rwy.
- Arthur L. Johnson. **The Montreal Secondary: Origins and History.** RH (Spring 1998), pp. 120-129. Northern New York's St. Lawrence Valley railroad from 1861 to the present.
- James R. Jones. **Denver & New Orleans in the Shadow of the Rockies.** Sundance Pub. (250 Broadway, Denver, CO 80203), [1998]. 376 pp., photos, maps. \$45. Beginning in 1880, saga of Colorado's first standard gauge railroad, which became the Colorado & Southern's route from Denver to Pueblo.
- Robert W. Jones. **Boston & Albany: The New York Central in New England.** Pine Tree Pr. (Box 39484, Los Angeles, CA 90039), 2 vols. \$49.95 each. Vol. 1: Boston to Worcester; Vol. 2: Worcester to Albany. "Definitive" history, lavishly illustrated. Rev: VR (July/Aug. 1998), p. 103.
- **Journal of Texas Shortline Railroads and Transportation.** (11902 Conann Court, Austin, TX 78753). Published quarterly, \$21.95 per yr/\$7.50 per issue. Journal's mission is to chronicle the history of over 800 Texas shortline railroads and tram operations. Each issue contains maps, photographs, and misc. articles on trails, stage lines, riverboats, streetcar lines, logging vehicles, steam tractors, and other forms of early transportation in Texas. Eight issues have been published thus far.
- George Konrad. **A Trip to the Tundra.** LGB *Telegram* (Spring 1998, Avail: Buffington Publishing, 1573 Landvater Rd., Hummelstown, PA 17036-8757), pp. 7-13, photos. History and current operations of the Mt. Washington Cog Rwy.
- William R. Middleron. **Indiana Railroad: The All-American Interurban.** VR (July/Aug. 1998), pp. 62-75. Formation of a single system of nearly state-wide interurban lines in the 1920s and 1930s with coverage of surviving equipment.
- James Scribbins. **Milwaukee Road in Its Hometown: In and Around the City of Milwaukee.** Kalmbach Pub. (Box 1612, Waukesha, WI 53187; 1-800-533-6644). 128 pp. \$18.95. Extensive coverage of depots, stations, and facilities, including Menominee valley locomotive shops. Rev: VR (July/Aug. 1998), p. 105.
- Warren Taylor. **Texas & Pacific.** VR (May/June 1998), pp. 43-53. History of line from New Orleans to El Paso.
- John H. White, Jr. **American Locomotives: An Engineering History, 1830-1880** Johns Hopkins Univ. Pr. (Baltimore), 1998. 624 pp., illus. \$49.95. Revised and expanded. Offers 11 new case histories of individual locomotives. Special section updates and annotates the original.

WATER TRANSPORTATION

- Kevin J. Crisman and Arthur B. Cohn. **When Horses Walked on Water: Horse-Powered Ferries in Nineteenth-Century America.** Smithsonian Inst. Pr., 1998. 368 pp., illus. \$37.50. Traces evolution of horseboats from early mechanisms that forced the animals to walk in tight circles to "endless floor" treadmills. Includes info. from only horseboat ever studied by archeologists – a wreck on the floor of Lake Champlain's Burlington Bay.
- **Historic Virginia River Atlases.** Virginia Canals & Navigation Society. (Avail: R. A. Davis, VC&NS Sales, Rt. 2, Box 254, Lexington, VA 24450; 540-463-6677; website: www.rockbridge.net/canal/.) Include \$2 p/h for first book, \$50 for each additional book. These atlases by Bill Trout [SIA] are designed for historians, archeologists, regional planners, canoeists, and other river users. Each includes an illustrated navigation and engineering history of the river, and a series of annotated legal-size strip maps at 7.5" topo scale showing canals, locks, batteau wing dams and sluices, dam and mill sites, Indian fish traps, iron furnaces, railway beds, and other historic river-

related sites rediscovered through field and archival work. Involvement of SIA members would be most welcome for this ongoing project. Among the currently available titles are: *The Appomattox River Atlas*, 49 pp., \$8; *Falls of the Appomattox Atlas*, 85 pp., \$10; *The Falls of the James Atlas*, 68 pp., \$8; *The Goose Creek Scenic River Atlas*, 16 pp., \$5; *The Great Dismal Atlas* (Dismal Swamp and historic navigation canals in SE Virginia and NE North Carolina), 151 pp., \$15; *The James River Batteau Festival Trail* (James River from Lynchburg to Virginia), 50 pp., \$7; *The Maury River Atlas*, 25 pp., \$5; *The Rappahannock Scenic River Atlas*, 31 pp., \$5; *The Rivanna Scenic River Atlas*, 34 pp., \$5; *The Shenandoah River Atlas*, 109 pp., \$15; *The Slate and Willis's Rivers Atlas*, 52 pp., \$8.

ROADS & HIGHWAYS

- Warren James Belasco. **Americans on the Road: From Auto-camp to Motel, 1910-1945.** Johns Hopkins Univ. Pr. (Baltimore), 1997. 224 pp., photos. \$15.95. Scholarly account of the rise of the motel industry as a response to the automobile and improved highways.
- Stephen Fox. **The Strange Triumph of Abner Doble.** *I&T* 14 (Summer 1998), pp. 34-44. Story of the near-success of the Doble steam automobile.
- Clint Johnson. **From Rails to Roads: The History of the Perley A. Thomas Car Works and Thomas Built Buses.** Bailey Marketing Group (Box 312, Rocky Mount, NC 27802), 1996. 113 pp., \$13. Corporate history of company founded in 1906 to build streetcars and which, in the 1930s, made the transition to school buses. Rev: *RH* (Spring 1998), p. 160.
- **The Lincoln Highway Forum.** Quarterly newsletter published by the Lincoln Highway Assoc. (est. 1992) contains news and features of America's first transcontinental highway with lots of illustrations, both contemporary and historical. \$25/yr. includes membership in the association, which hosts road rallies and promotes historic preservation of sites along the highway. Info: Lincoln Hwy. Assoc., Box 8117, St. Louis, MO 63156-8117.
- **New Mexico Route 66 Association Newsletter.** Quarterly newsletter features news on efforts to preserve and interpret the route and its roadside businesses. Avail: NM Route 66 Assoc., 1415 Central Ave. NE, Albuquerque, NM 87106. \$10/yr.
- Craig S. Pascoe. **Made in Dixie But... The Anderson Motor Company and the Problems of Financing and Acceptance of a Southern Made Automobile.** *Automotive History Review* 32 (Spring 1998), pp. 28-37. Review and newsletter come with membership in the Society of Automotive Historians, 1102 Long Cove Road, Gales Ferry, CT 06335.
- **The Signs and Rhymes of Burma Shave.** Sentimental Productions (Cincinnati; 1-800-762-0338), 1991. 53-min. video. \$29.95. Using interviews with family members, former employees, collectors, and winners of the annual jingle contest, documents the rise of the Burma Vita Co. from near bankruptcy in the 1920s to a position second only to the giant Barbasol. Ties the company's fortunes to its founders ingenuity and currents in American social history, including automobile culture. Many examples of jingles from the famous six-sign highway campaign.

STRUCTURES & BUILDING TECHNOLOGY

- Gayle Cooper. **Air-conditioning in America: Engineers and the Controlled Environment.** Johns Hopkins Univ. Pr. (Baltimore),

1998. 248 pp., illus., \$35. Beginning with two famous air-conditioning installations in 1904 – the New York Stock Exchange and the Sackett-Wilhelms Lithography Co. – describes efforts of engineers to achieve artificial climate indoors.

- Stephen Dial. **Smokestack Rescue.** *Civil Engineering* 68 (May 1998), pp. 62-4. Conversion of the abandoned Alamo Cement Co. plant into the Alamo Quarry Market mall inc. first use of epoxy fiber-wrap (used widely in seismic retrofits) to restore smokestacks.
- M. S. J. Gani. **Cement and Concrete.** Chapman & Hall (New York), 1997. 212 pp. \$44.95. Structure, form and material properties of cement and concrete, but also inc. chapters on historical development and profiles of inventors. Thorough account of evolution of Portland cement inc. recent innovations, such as aluminum additives.
- Margot Gayle and Carol Gayle. **Cast-Iron Architecture in America: The Significance of James Bogardus.** W. W. Norton, 1998. 272 pp., b/w photos, illus., bibliog. \$39.50. The first book on Bogardus's life and work chronicles his efforts to promote cast-iron as a building material that was strong, economical, fire resistant, and suitable for ornamentation. He invented several new methods of construction. Describes how iron architecture changed the face of American cities in the mid-19th c., also recent efforts to preserve surviving examples. Margot Gayle, president of the Friends of Cast-Iron Architecture, received the 1997 SIA General Tools Award for lifetime service to IA through her passionate advocacy for the preservation of cast-iron architecture in N.Y.C. and throughout the U. S. Co-authored with Carol Gayle, her daughter, a history professor at Lake Forest College.
- Robert W. Piwarzyk. **A Sad Day in Mudville.** *Samuel Knight Chapter SIA Newsletter* (Apr. 1998), pp. 6-7. Brick kilns at the H. C. Muddox brickyard, formerly the Lone Fire Brick Co. (1911) in Lone, CA.
- Patrick Rogers. **Vertical Leap.** *Preservation* (May/June 1998), pp. 52-61. Elisha Graves Otis started the elevator's ascent in 1852, and cities haven't been the same since.
- Michael Stratton, ed. **Structure and Style, Conserving 20th Century Buildings.** E & FN Spon (Cheriton House, North Way, Andover, Hants, SP10 5BE, England), 1997. 230 pp., line drawings, photos. £29.95. The challenges of evaluating and conserving offices, factories, public buildings, and housing in urban settings. Particular attention is given to steel or concrete frame structures clad in stone, ceramic, or glass.

BRIDGES & TUNNELS

- David P. Billington. **Robert Maillart: Builder, Designer, and Artist.** Cambridge Univ. Pr. (New York), 1997. 331 pp. \$70. Biography of the turn-of-the century Swiss bridge engineer, now regarded as creator of the concrete hollow box, the concrete flat-slab floor and the concrete deck-stiffened arch, and designer of some of the world's most memorable bridges.
- Robert S. Cortright. **Bridging: Discovering the Beauty of Bridges.** Bridge Ink (10200 SW Hoodview Dr., Tigard, OR 97224), 176 pp., \$29.95. Illustrated with 283 color photos covering 20 centuries of bridge building in 16 countries in North America and Europe.
- John Diehl. **Bridges to the Past.** *Timeline* 15,3 (May/June 1998), pp. 30-51. History of Ohio's covered bridges.
- Jerrilynn D. Dodds. **Bridge Over the Neretva.** *Archaeology*

(Jan./Feb. 1998), pp. 48-53. Efforts to reconstruct a 16th-cen. stone arch bridge destroyed by the war in Bosnia.

- Drew Ferherston. **Chunnel: The Amazing Story of the Under-sea Crossing of the English Channel.** Times Books, 1997. 404 pp. \$35. History of previous efforts to cross the Channel by bridge, tunnel, etc. Rev.: *Newsday*, Dec. 7, 1997.
- Thomas Kelly. **Payback.** Knopf (New York), 1997. \$23. A novel of murder and mayhem among the construction unions, Irish gangsters, and Italian mafia of NYC in the mid-1980s. Written by a former "sandhog," the focus is on the workers who drill, blast and muck out the tunnels below the city and the story is filled with realistic details of their jobs.
- **Railroad Bridges in the Heartland.** Changan Rails (801 Buckthorn, Mahomet, IL 61853), ca. 1998. 216 pp., 240 b/w photos, text, maps. \$32. Contemporary photo album including movable bridges in Chicago and aerial photos of the bridges across the Mississippi, Ohio, Illinois, and Wabash rivers.

WATER CONTROL & RECLAMATION

- Donald C. Jackson. **Building the Ultimate Dam: John S. Eastwood and the Control of Water in the West.** Univ. Pr. of Kansas (Lawrence), 1995. 336 pp., illus., bibl., index.
- Kermit Pattison. **Why Did the Dam Burst? I&T** (Summer 1998), pp. 22-31. - Re-examination by a geotechnical engineer of causes of the 1928 collapse of the St. Francis Dam, a gravity arch dam built by Wm. Mulholland and the city of Los Angeles. The disaster killed more than 500.
- Dale H. Porter. **The Thames Embankment: Environment, Technology, and Society in Victorian London.** Univ. of Akron Pr. (Bierce Library 374B, Akron OH 44325-1703), 1998. 318 pp. \$49.95. Historical account of the construction of the Thames River embankment and sewage system. Although hampered by vindictive engineers, cholera epidemics and Victorian notions of cleanliness, it changed London life.
- Martin Reuss. **Designing the Bayous: The Control of Water in the Atchafalaya Basin, 1800-1995.** Office of History, U.S. Army Corps of Engineers (7701 Telegraph Rd., Alexandria VA 22315-3865), 1998. 474 pp. \$25. The Atchafalaya Basin in Louisiana, like many major bodies of water, has provided recreation, power and food for centuries, but it has also destroyed towns, farms and families. The author examines how local and federal governments have tried to reconcile the conflicting roles of the basin while continuing to preserve its environment. Inc. discussion of early flood control efforts and the politics of engineering.

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 members, to the Publications of Interest c/o the SIA News-letter, Box 45, Toughkenamon, PA 19374.

We endeavor to make citations as complete as possible, but they are from a variety of sources, and are sometimes incomplete. If a date, publisher, price, or other statistic is missing, it simply means that it was unavailable, and unfortunately, we do not have the time to track down these missing bits. The SIA, unless otherwise noted, is not a source for any of the cited works. Readers are encouraged to use their library, book store, or school for assistance with locating books or articles.

MINES & MINING

- Geoffrey T. Bleakley. **A History of the Chisana Mining District, Alaska, 1890-1990.** National Park Service, Alaska Field Area (Anchorage), 1996. 148 pp., maps, photos. NPS Resource Report NPS/AFARCR/CRR-96/26. Comprehensive study of surviving resources, archeology, and HAER reports on gold mines and mills. District boomed from about 1913 to 1917.
- Joan Campion, ed. **Smokestacks and Black Diamonds.** Canal History & Tech. Pr. (30 Centre Sq., Easton, PA 18042-7743), 1998. illus. \$29.50 softcover; \$39.50 hardcover. Collection of short pieces on Carbon County, PA, history including early days in the coal fields, early Mauch Chunk, biography of Asa Packer, and Molly Maguire trials. Photographs from the work of George Harvan and collections of the National Canal Museum.

ABBREVIATIONS:

| | |
|-----|-----------------------------------------------|
| I&T | = American Heritage of Invention & Technology |
| MHR | = Material History Review |
| PH | = Public Historian |
| RH | = Railroad History |
| T&C | = Technology & Culture |
| VR | = Vintage Rails |

Whither Industrial Archeology A Symposium

(continued from page 5)

the field. Much of the current work in IA relates in some way to government programs and regulations designed to protect cultural resources. We therefore have a session devoted to issues in compliance, mitigation, and preservation. Another session will be devoted to education. One of the underlying reasons we engage in IA is to educate. We also concern ourselves with how to educate those who will undertake work in our field. Yet another key theme is interpretation, so a session will examine that set of issues: How do we derive or extract useful information from objects, buildings, or sites? How do we interpret that information to various audiences? Our closing session will examine new directions for IA.

In addition to speakers from North America, we have invited several guests from abroad. Their perspectives will help us to view industrial archeology with more discerning eyes and hopefully stimulate new approaches to our work.

An important aspect of the symposium will be the break-out discussion groups. We don't want the flow of information to be one-way. The formal presentations are intended to be provocative. After each session, we will break the group in two, offering participants the opportunity to discuss issues brought to the table. Each break-out session will have a moderator and a secretary to record the proceedings and serve, perhaps, as a basis for some new undertakings.

The program committee plans that Whither Industrial Archeology will be a serious working event for all who devote a portion of their lives to understanding who we are as an industrial people. Registration materials will be mailed to all SIA members and other interested persons in September.

F. Q.

Digging Out the *Kalakala*

There is an unusual structure on the beach of Kodiak Island, Alaska. Like other structures nearby, it is surrounded by the dilapidated remnants of a failed cannery operation. Like them, it has seen heavy use. And like them, there's a decent chance that it will wind up as scrap-metal. Still, this one has a sleekness to it. The word "Kalakala" freshly painted on its side, this structure looks as though it could slip from the land into the sea and be perfectly at home in motion. In this case, looks don't deceive, and making this happen is the goal of the Kalakala Foundation. For its founder, Peter Bevis of Seattle, getting the ferry MV *Kalakala* off that beach and away from the cutter's torch has been a ten-year-long labor, justifying hard work, cold nights, and deep debt.

Constructed in 1935, the *Kalakala's* history goes back further, to the steamer *Peralta*, built as a San Francisco Bay ferry in 1926. After being damaged above the waterline by a fire in 1933, the *Peralta's* hull became available as salvage. Meanwhile, in Seattle, Capt. Alexander Peabody of the Puget Sound Navigation Co. wanted a streamlined flagship for his Black Ball Line of ferries, a symbol to bring his company into the modern age. Streamlining had taken hold in aircraft design as a route to better efficiency and performance. The automakers and railroads were adopting those same sleek lines partly for those reasons, but mostly as a matter of style. It was good business to look "modern." Peabody probably imagined himself building the first example of how all ships and ferries would look in the future. He did not foresee the streamline style's rapid fall from popularity and a more scientific understanding of streamlining, particularly the difference between what is important at 400 mph vs. 18 knots. He probably never imagined that the *Kalakala* would be the first and last streamlined ferry, but she was.

What Peabody did know, however, was that building a new streamlined ferry would be expensive. The *Peralta's* hull, available at a bargain price, served as a catalyst to get the job moving. It was towed to the Lake Washington Shipyard in Houghton, WA (now part of Kirkland), the only shipyard on the West Coast equipped for an electro-welding job of this size. Using the old hull as a starting point, work on the "ferry of the future" moved forward. Christened with the Chinook word for "flying bird", she was launched in 1935. With more than a touch of



Peter Bevis photo.

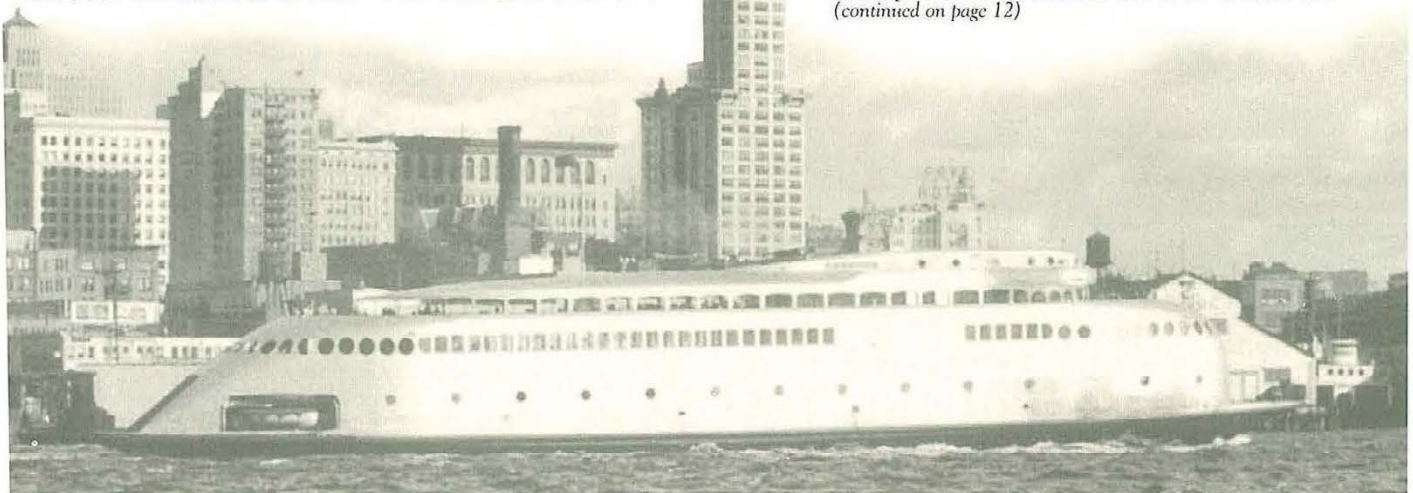
The Kalakala in its landlocked position as a stationary cannery in Kodiak, Alaska, 1996.

hyperbole, the *Saturday Evening Post* called the *Kalakala* "the most important nautical vessel since Noah's ark." She was proudly featured in ads for American Hammered Piston Rings (those used in the *Kalakala* were 19-1/2" in diameter, and they could "take it", according to the ad copy). So at the height of the Depression, this silvery vision of the future emerged, and began service between Seattle and Bremerton on Puget Sound.

The vessel's modern character was not confined to its streamlined look. Among other notable features were the first telecom system between wheelhouse and engine room (replacing the standard teletype) and the first automatic fire control sprinklers throughout a ferry. She had the most powerful engine ever installed in a ferry up to that time, a Busch-Sulzer ten-cylinder two-stroke diesel rated at 3,000 hp. It made the *Kalakala* the fastest ferry on Puget Sound, with a cruising speed of 18.5 knots. (Of the 19 engines built identical to the *Kalakala's*, 18 went into power generation. There has been a report that one of these engines continues to serve as a standby generator somewhere in the Southeastern U.S. Any confirmation of this would be welcomed by the Kalakala Foundation). In addition to all of this, the *Kalakala* also had the first commercial radar navigation system once the technology was declassified after WW II (FCC license #001).

For the next several decades the *Kalakala* was both icon and workhorse. During the day, she ferried shipyard workers back and forth to Bremerton. At night, there were moonlight cruises, accompanied by the *Kalakala's* own Flying Bird Orchestra. The *Kalakala* was loved and considered a Seattle attraction well into the age of the futuristic Space Needle built for the 1963 World's Fair.

(continued on page 12)



Puget Sound Marine Historical Society, photo.

The Kalakala cruises Seattle's waterfront, ca. 1935.

Digging Out the *Kalakala*

(continued from page 11)

Time did, however, take its toll. The ferry's car lanes were too narrow for the larger vehicles of the 1950s. Vehicle capacity was reduced, and passengers sometimes found themselves exiting through their car windows. The direct-drive propulsion system was obsolete and the steering gear was not up to the technological level of the rest of the vessel. She also had a few quirks, including a tendency to vibrate while underway at top speed. In the space-age (the age of the Saturn V, not of Buck Rogers) when nothing modern looked like the *Kalakala*, the vibration was no longer endearing, but a sign of anachronism. Why the *Kalakala* was prone to vibration is unknown. It could have been the result of a 1926 hull being driven to 18 knots. It could have been the difference between aerodynamic styling and true aerodynamics. It also could have been the size of the giant engine relative to the vessel.

In 1967, the *Kalakala* was sold at auction for the inglorious role of an ocean-going fish processing plant. In 1972, after blowing a piston head, she was towed to Kodiak, a local hill was dynamited for fill, and the ship became a stationary cannery operation. Following the bankruptcy of the last of several owners in 1980, maintenance largely stopped. Deterioration set in. The city of Kodiak took title and realized it had a liability on its hands. There began to be talk of cutting her up.

Four years later, Peter Bevis, while working on a fishing boat, saw the *Kalakala*. In 1988, he toured the boat by flashlight, and it captured his imagination. Later, he had a few days off, and decided to paint the roof. He bought all of the silver paint available in Kodiak, and went to work with a scraping-shovel and a roller. Although the following ten years can perhaps be viewed as a little weekend painting that got out of hand, this act says something about the *Kalakala* Foundation's founder's philosophy of preservation: when in doubt, put muscle to metal. Bevis decided, with-

out title to the boat or funding, that he would save the *Kalakala* and return it to Seattle.

The period from 1988 to 1995 was characterized by fits and starts in the preservation effort. Little physical work was done, though the foundation was incorporated in 1992. Once the foundation became an official non-profit, more organized meetings and planning took place, and staff was hired, but the *Kalakala* was still

rusting and no closer to Seattle. The city of Kodiak informally approved the operation, but retained its right to scrap the ship if preservation efforts were unsuccessful.

In 1995, Bevis called the other members of the foundation. "This is no drill" was his message. If you want to save the *Kalakala*, come up to Alaska and start working. Fortunately, the members of the foundation included welders, electricians, and a shipwright. Twelve of them came, and he called this his "dream team." First priority was to stop the ongoing deterioration, which mostly meant plugging rainwater leaks, scraping, and painting. This naturally improved the aesthetics of the boat, something helpful to fund raising and gaining local support. Once deterioration was brought under control, focus shifted to eliminating the chance of catastrophic destruction. This meant the removal of flammables, including oil from the bilge and over 50 tons of waxed cardboard shrimp-packing boxes.

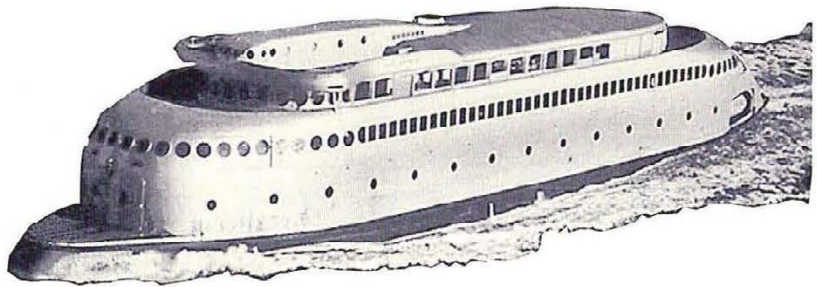
Thereafter, work began on seaworthiness. Cannery equipment was removed to lighten the boat. The hull was ultrasound tested to check if enough metal remained to make the return trip possible. For several weeks there was a virtual assembly-line of welders above-board cutting circles of steel in different sizes, then passing them below to where other welders used them to patch holes left in the bulkheads by the cannery plumbing. Finally, excavation had to be done, giving the *Kalakala* a path to the sea. Some of this work was done by volunteers, most of it by workers drawing a paycheck. And although support and small contributions have been forthcoming, the foundation, and particularly Peter Bevis, are now more than half a million dollars in debt.

Last April 27, late at night, that debt didn't seem to matter much as the *Kalakala* easily floated free and rose several inches on a high tide. The stage was set for the *Kalakala* to be towed out into open water at the end of May. Luck ran out, however, when a maritime surveyor from Lloyds of London informed the crew that, though plenty of steel remains in the hull plates, the poor condition of the rivets holding them together will make the tow to Seattle too risky to insure. The *Kalakala*'s hull plates could potentially separate, causing her to go down in bad weather.

The only safe way to bring the *Kalakala* back to Seattle will be on a submersible barge, a device which is sunk and then filled with air to lift the boat from below. If this becomes a reality, the *Kalakala*, true to its name, will fly home, with even its keel above the surface of the ocean. These barges, however, do not come cheaply. \$700,000 is the estimated cost. Add to this statements like those made by Bill Jones, City Manager of Kodiak, that "I wouldn't lose a moment's sleep...whether it goes back to Seattle on a barge as a monument or as scrap, it's all the same to me. We just want the *Kalakala* gone," and it's not surprising that a do-or-die sense of desperation is settling over the project. The "just do it" approach to saving the *Kalakala* has brought her this far, probably saving her from being cut up years ago. But now only strong financial support will bring her home.

To learn more about the *Kalakala* and her status, visit the foundation's website at www.kalakala.org, or call the *Kalakala* Foundation (888) 823-1935.

J. S.



Peter Bevis photo.



Volunteer Paul Luksch checks the depth of the *Kalakala*'s keel. When the *Kalakala* unexpectedly rose on a high tide, Luksch said "Perhaps it's all the weight we have removed from her, perhaps it's our imagination or perhaps the old girl is getting ready to float home." The *Kalakala* needs a miracle if it is to make the trip back to Seattle from Kodiak.

Notes & Queries

Digitized Images of Industry and Engineering are now being made available on the Internet by the National Archives and Records Administration (NARA) as part of an effort to increase access to some of the federal agency's most significant documents. Recently digitized materials include photographs of civil works projects in the northwestern states, 1900-52; Lewis Hine photographs documenting child labor, 1908-12; and, Civil War engineering drawings including diagrams and blueprints of forts. Additional documents are added monthly. The materials can be accessed on the World Wide Web through the NARA Archival Information Locator (NAIL) at www.nara.gov/nara/nail.html.

The **Anthropological Index Online**, administered by the Royal Anthropological Institute of Great Britain and Ireland, wishes to bring to the attention of SIA members that it is now providing without charge an online reference service to all branches of anthropology and archeology. The bibliography is compiled from all periodicals received by the Library of the Department of Ethnography of the British Museum (Museum of Mankind) from around the world. The bibliography will be of potential interest in particular to those studying material culture of ancient and preindustrial societies. All geographic regions are covered, with particularly strong coverage of Eastern and Central Europe. The index is available at www.lucy.ucl.ac.uk/AIO.html.

IA in Philately. This spring, Canada Post celebrated the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) centennial with a stamp featuring equipment common to the honored industries. The CIM began as an amalgamation of provincial mining associations and was incorporated by an act of Parliament in 1898. Among the CIM's early achievements were the successful blocking of an export tax on the copper-nickel of Sudbury, the reduction of royalty on Yukon gold, and reformation of Quebec's mining regulations. The stamps are available from Canada Post, 1-800-565-4362.

In March, Royal Mail (the British Post Office) issued five stamps featuring historic lighthouses in honor of two anniversaries: the 300th anniversary of the lighting of the first Eddystone lighthouse off Plymouth, Devon, in England; and the final year (1998) of manned lighthouses in the United Kingdom. The stamps depict lighthouses from across the UK and all incorporate a band that shows the pattern and character of the lamp used by each lighthouse. In addition, sea charts from the era in which each lighthouse was built are illustrated in the background. For more information contact the British Philatelic Bureau, Interpost, Agents, Box 378, Malvern, NY 11565.

The Canal Society of Pennsylvania held its spring field trip in April, visiting the Eastern Division of the Pennsylvania Main Line Canal between Columbia and Harrisburg. This section of the canal has undergone a wonderful transformation over the past 15 years. The railroad has granted ownership of the property to Conoy Township. Hiking trails have been developed and the old locks that were hidden by the overgrowth have been cleared. The outing included a ride on the Middletown-Hummelstown RR, which was constructed on the towpath of the Union Canal; a walking tour of Columbia, where section boats carried on railroad cars by the Columbia & Philadelphia RR once were lowered down to the Eastern Division by an inclined plane; and a visit to the Halden-

Canada's mineral and energy industries are celebrated by a new stamp. A cutting wheel (from Tamrock Canada of Lively, Ontario, just north of Sudbury) used in mining to break new ground appears in the stamp's upper left corner. The Hibernia oil-drilling platform off the coast of Newfoundland appears in the lower left corner. The right side of the stamp features an image of a smelter. A silhouette of a pick axe, the archetypal miner's tool, is overlaid across the three images.



Canada Post photo.

man mansion in Marietta, now undergoing restoration. The Canal Society offers twice yearly field trips, the publication *Canal Currents*, and discounts to the National Canal Museum, Easton, PA. Membership info: Charles A. Glanville, Exec. Dir., Canal Society of PA, Box 2537, West Chester, PA 19380-2537.

Secrets of the Lost Empires II. In 1997, NOVA and WGBH-TV treated American television viewers to a very different kind of archeological adventure. Most documentaries about antiquity have been forced to rely solely on talking heads and inanimate artifacts to bring the past to life. *Secrets of the Lost Empire* broke with this tradition by following teams of archeologists, historians, architects, and engineers as they struggled to replicate the technological feats of ancient civilizations using the tools and materials known to be available at that time. The producers are planning five new one-hour programs. One concerns the puzzling question of how the ancient Easter Islanders were able to move and raise the giant stone statues for which their island is famous. A teacher, archeologists, and an artist will work with a team of 70 Easter Islanders to build and haul a 14-ton replica statue over the same rugged track their ancestors followed more than 500 years ago. In another program, archeologists and engineers will travel to Turkey to unravel the sophisticated engineering that powered the glorious bathhouses of ancient Rome. The team plans to build a functioning three-room bathhouse with the archeological record leaving good clues as to how the under-floor heating worked, but exactly how the system was vented and the plumbing contrived will be up to the team to uncover. The next program will take a team of experts to the famous Crusader castle Krak des Chevaliers in Syria to build and test out the destructive capabilities of a trebuchet. The team will interpret Medieval illustrations to come up with a realistic design for the siege weapon and test it by throwing stone missiles against a replica section of a stone wall target. The NOVA team that failed to raise a 40-ton Egyptian obelisk in a past program will try again, as well as try to tackle another difficult problem, the construction of a boat sturdy enough to transport the obelisk down the Nile. The final program will travel to Sichuan, China, to reproduce a suspension bridge made from bamboo, a cunning design attributed to the fifth-century General Cui Yan-Bo. The Chinese were able to fashion cables from bamboo that achieved nearly half the tensile strength of a steel cable. ■

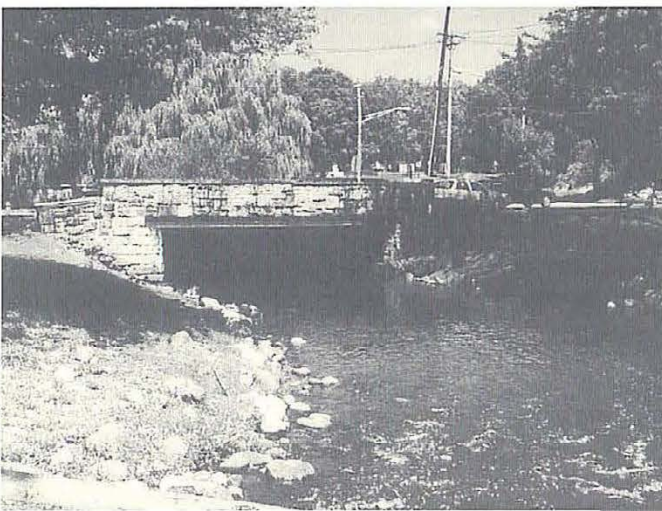
SITES & STRUCTURES

The Preservation Society of Allegany County (MD) reports the demolition in January of the **Locust Grove Bridge**, built by the Maryland Mining Co. in 1845-46 as part of a rail line serving the Eckhart coal mine, and later part of the Cumberland & Pennsylvania RR's Eckhart Branch. The four-span, brick arch bridge over Wills Creek was one of the oldest surviving railroad bridges in the nation. The bridge had been abandoned for more than 20 years, was deteriorated, and was believed to contribute to flooding by trapping trees and debris. The bridge was torn down by its owner, CSX Transportation, responding to the Governor's Flood Mitigation Task Force, which recommended removal. The plan was reviewed and later approved by the Maryland Historical Trust.

Three turn-of-the-century bridges in New Jersey will be preserved thanks to matching grants totaling \$1.25 million awarded by the New Jersey Historic Trust in 1997. The **Georgian Court Bridge** is part of the Georgian Court estate in Lakewood. The estate and bridge were the design of architect Bruce Price, best known for Tuxedo Park in New York. The bridge carries a county road over an inlet leading from Lake Carasaljo to the sunken garden and lagoon, one of the estate's formal landscape features. The grant will assist Ocean County with restoration of the reinforced-concrete arch bridge's glazed-brick spandrel walls, terra-cotta faced abutments, and wrought-iron railings. The **Hardenburgh Avenue Bridge** in Demarest, Bergen County, consists of a single-span brick arch built in 1909 and widened to one side using steel girder and concrete jack arch construction in 1911. Work will include stabilization of the abutments, repointing and repair of the brick arch, and rebuilding of the stone parapets. The **Higginsville Road Twin Bridges**, Hillsborough, Somerset County, are two pin-connected Pratt through truss bridges spanning the South Branch of the Raritan River. The north span was erected by Milliken Bros. in 1890, and the south span by the Wrought Iron Bridge Co. in 1893. The grant will be used to repair and strengthen the trusses to cope with the weight of modern traffic. Info: Harriette C. Hawkins, NJ Historic Trust, CN 404, Trenton, NJ 08625; (609) 984-0473.

In Delaware, a recent bridge replacement project in Sussex County unearthed a deeply buried brick foundation and remains of the water-power system of **Cabbage Mill** believed to have operated from the 1780s to about 1910. Construction workers alerted DelDOT archeologists, who have since undertaken an intensive investigation and are preparing a report. Water-powered mills have almost completely disappeared from the landscape of Delaware's rural coastal plain, where water-power sites were limited to begin with because of the flat topography and small tidal streams. Investigations suggest that the mill burned and was rebuilt at least twice, once in the early 19th century and again in the last quarter of that century. Insurance and tax assessment records of 1868 describe a flour, grist, and saw mill measuring 24x40 ft., with a 16x20 ft. addition built by itinerant millwright Charles L. Miles. Several logs and a concentration of sawdust suggest that the addition was designed to contain the sawmill. Excavations of the brick foundation uncovered a concrete floor, probably to support mill machinery. From a single patent bottle fragment, archeologists were able to date the floor to no earlier than the last quarter of the 19th century. Continued excavations revealed at least one, possibly two, lower brick floors and below that several overlapping courses of timber. These mortised wooden beams and pilings appear to be from the earliest construction of the mill. Info: DelDOT, Division of Planning, Box 778, Dover, DE 19903.

New Jersey Historic Trust photos.

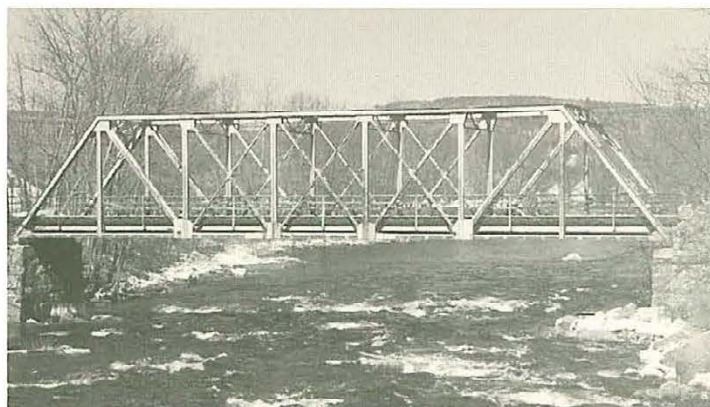


Bridges are the subject of recent preservation grants by the NJ Historic Trust. The Georgian Court (upper right), the Hardenburgh Avenue (above), and the Higginsville Road Twin bridges (lower right).

The Ontario Archaeological Society (OAS) is launching a campaign to preserve the ruins of the **Old Mill** on the Humber River, just north of Bloor Street in Toronto, and to stop developers from building a new hotel that would incorporate the walls of the mill into a six-story lobby. Some SIA members may remember the mill's remaining Humberstone walls from the 1994 Annual Conference. A mill has stood at or near the site since the 1790s. The current walls are believed to date from an expansion of the mill complex in the mid-19th century. The ruins are considered Toronto's oldest industrial landmark and a place for a pleasurable outing by many of Toronto's citizens. OAS Director Lisa Ferguson writes that "We cannot allow historic sites to be used as building materials, but this is essentially what is proposed. The [hotel] plan, in part, is being marketed as if it addresses the issue of the deteriorating state of the ruins. This plan in no way preserves or restores the Old Mill, and in fact destroys the integrity of the site itself." The OAS has initiated a write-in campaign to the Toronto City Council to halt the building permit. Info: OAS, 126 Willowdale Ave., North York, ON, M2N 4Y2; phone/fax: 416-730-0797.

The 10th Street Bridge in Great Falls, MT (SIAN 25,2 Summer 1996), has a new lease on life after the state handed ownership of the bridge to the city this past January. The 1,130 ft.-long, reinforced-concrete, open-spandrel-arch bridge [NR] built in 1919 was slated for demolition by Montana DOT in 1995 when Cascade Preservation (CP), a local preservation organization, launched a campaign to save it. The effort was spearheaded by local resident Arlyne Reichert, who made a presentation at the SIA 1996 Annual Conference and recruited several SIA pontists, including Abba Lichtenstein and Eric DeLony, to lend their expertise to the cause. After a prolonged court battle joined by the National Trust to halt demolition, CP worked out an agreement with the city and state to transfer ownership to Great Falls as long as local taxes were not used for renovation. The state reallocated \$450,000, originally earmarked for demolition, to the restoration effort. CP plans to raise the remaining \$250,000 required to rehabilitate the railings, sidewalks, deck, and spandrels. The bridge has been incorporated into plans for a pedestrian causeway and park on the banks of the Missouri River.

George Konrad [SIA] reports that his hometown of Henniker, NH, has voted to approve the rehabilitation of the **Patterson Hill Bridge** (1915) over the Contoocook River rather than have it replaced by a new structure. The bridge is a one-span, riveted, Pratt through truss bridge designed by John Storrs, New Hampshire's first state highway engineer and a partner in Storrs & Storrs Bridge Engineers of Concord. It was fabricated and erected



Local residents of the Town of Henniker, NH, have voiced their approval and appropriated funds for the rehabilitation of the 1915 Patterson Hill Bridge.

by the Groton Bridge Co., Groton, NY. It is believed to be one of only two such bridges still in service in the state and is considered National Register-eligible by NHDOT and the NH Division of Cultural Resources. A shifting abutment will be stabilized and the steel superstructure strengthened as part of the project. Preventing replacement of the bridge with a new wider structure also has resulted in the preservation of a former toll house at one corner of the bridge.

Ontario Hydro's DeCew Falls Generating Station (St. Catharines, ON), the oldest generating station still in service for the utility, is celebrating its 100th year of operation with an open house for the public on August 29. The open house will include a self-guided tour, equipment displays, and exhibits. Built in 1898 by the Cataract Power Co., the DeCew Falls Generating Station was purchased by Ontario Power in 1930. Info: Alan Cimprich, (905) 934-9439; e-mail: cimprich@niagra.com. ■

IA EXHIBITS

The Hagley Museum & Library (Wilmington, DE) presented through August a traveling exhibit *Let Children Be Children: Lewis Wickes Hine's Crusade Against Child Labor*. Hine's photography had a great impact on Progressive-era reform of child labor laws, and shows children and families at work in a variety of factories and workshops. The exhibit was organized by the George Eastman House International Museum of Photography and Film, and draws heavily from their collection.

Images du Patrimoine Industriel des États-Unis (the Industrial Heritage in the U.S.A., see SIAN 26,4 Winter 1997), an exhibit of over 200 photographs of American technology and industry with many SIA-member contributors, has been traveling in Italy after spending the last year in galleries in Le Creusot and Paris, France. In May, the exhibit was shown at the Fabbrica Alta, one of the biggest textile mills in northern Italy in Schio, west of Venice. The textile mill, a superb industrial monument, was established by Alessandro Rossi (ca. 1870). From June to September, the exhibit will be shown at the Leonardo da Vinci Museum of Science and Technology in Milan. Giovanni Luigi Fontana, professor at Foscari University in Venice and president of the recently established Italian National Association for Industrial Archeology, and Massimo Negri, one of the oldest friends of IA in Italy, helped organize the Italian showings. ■

CONTRIBUTORS TO THIS ISSUE

Louis Bergeron, Le Creusot, France; Betsy Carey, Trenton, NJ; Alan Cimprich, St. Catharines, Ont.; Eric DeLony, Washington, DC; Mary Habstritt, New York, NY; Jay Harding, Palmyra, NY; Charles K. Hyde, Detroit, MI; Robert Johnson, Chicago, IL; George Konrad, Henniker, NH; James Martin, Fresno, CA; Pat Martin, Houghton, MI; Carol Poh Miller, Cleveland, OH; Sandy Noyes, Chatham, NY; David Poirier, Hartford, CT; Fred Quivik, Froid, MT; Arlyne Reichert, Great Falls, MT; Jordan Singer, New York, NY; Robert Stewart, West Suffield, CT; Robert Vogel, Washington DC; Mark Watson, Edinburgh, Scotland, UK; Zip Zimmerman, Yardley, PA.

Graphic design services kindly are donated by Joe Macasek of MacGraphics, Morristown, NJ.

With thanks

CALENDAR

1998

September 11-13: Environments of the Industrial Age – An Asset for the Post-Industrial Society? International Seminar, Stockholm, Sweden. How to accomplish the preservation and reuse of industrial landscapes and factories. Papers from across Europe. Info: Inger Jonsson, Museum of Work, Laxholmen S-602 21 Norrköping, Sweden. Phone: 46-11-189800; fax 46-11 182290; e-mail: inger.jonsson@elchist.uu.se.

Sept. 30-Oct. 4: SIA Fall Tour of Connecticut Valley. Early bird tour on Sept. 30 and a "do-it-yourself" tour on Oct. 4. (See article elsewhere in this issue.) Info: Bob Stewart, 1230 Copper Hill Rd., West Suffield, CT 06093; (860) 668-2928; fax 668-9988; e-mail: 73071.3411@compuserve.com.

October 15-18: Society for the History of Technology (SHOT) Annual Meeting, Baltimore, MD. Info: SHOT, Secretary, History Dept., 310 Thach Hall, Auburn Univ., Auburn, AL 36849. Homepage: <http://hfm.umd.umich.edu/ic/SHOT>.

October 16-18: Historical Perspectives on Business, Labour, Technology, and Society: The Fifth Canadian Business History Conference, McMaster University, Hamilton, Ont. Info: Ken Cruikshank, Dept. of History, McMaster Univ., Hamilton, Ont. L8S 4L9; e-mail: cruiksha@mcmaster.ca

October 21-24: Society for Commercial Archeology (SCA) Annual Conference, Chattanooga, TN. "Drivin' the Dixie: Automobile Tourism in the South" explores automobile tourism and its impact on the commercial built environment. Includes tours of the Dixie Highway in north Georgia and Tennessee. Info: Jeffrey L. Durbin (404) 651-6546; e-mail: Jeff_Durbin@mail.dnr.state.ga.us.

October 30: Technology and Artistic Practice, Hagley Museum & Library, Wilmington, DE. Historic perspectives on artistic uses of new materials and machines. Info: HML, Center for the History of Business, Technology, and Society, Box 3630, Wilmington, DE 19807; (302) 658-2400; fax 655-3188.

November 4-9: Association of Railway Museums Convention, Orange Empire Railway Museum, Perris, CA. Seminars and tours

of So. California railway heritage. Info: OERM, Box 548, Perris, CA 92572-0548.

November 12-14: Whither Industrial Archeology, Symposium, Lowell National Historic Park, Lowell, MA. Co-sponsored by the SIA. Reflections on the past, present, and future of industrial archeology in North America. Info: Gray Fitzsimons, Park Historian, Lowell National Historic Park, 67 Kirk St., Lowell, MA 01852-1029; (978) 275-1724; fax 275-1762; e-mail: gray_fitzsimons@nps.gov.

November 13-14: Manufacturing, Marketing, and Meaning: Glass in American Life, Historical Society of Western PA, Pittsburgh. Info: HSWP, 1212 Smallman St., Pittsburgh, PA 15222.

1999

January 5-10: Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Salt Lake City. Conference theme is "Crossroads of the West: 19th Century Transportation, Mining and Commercial Development in the Intermountain West." Info: Don Southworth or Michael R. Polk, Sagebrush Consultants, 3670 Quincy Ave., Ste. 203, Ogden, UT 88403; (801) 394-0013; fax 394-0032; e-mail: sageb@aol.com.

March 12-13: Multiple Views, Multiple Meanings: A Critical Look at Integrity, Goucher College, Towson, MD. National Council for Preservation Education co-sponsored event looking at the theory and practice of historic integrity in the preservation movement. Info: Michael A. Tomlin, NCPE, 210 W. Sibley Hall, Cornell Univ., Ithaca, NY 14853; (607) 255-7261; fax 255-1971; e-mail: mat4@cornell.edu.

April 14-18: American Society for Environmental History Biennial Meeting, Tucson, AZ. Info: Edmund Russell, SEAS, Thornton Hall A-237, Univ. of VA, Charlottesville, VA 22903; e-mail: cpr5d@virginia.edu.

April 23-25: Ironmasters Conference, Morgantown, WV. Friday and Sunday tours, Saturday paper session. Paper proposals on historic ironmaking or iron-related topics are welcomed. Info: Lee Maddex, (304) 743-3829; e-mail: lmaddex@wvu.edu.

June 3-7: SIA Annual Conference, Savannah, GA. Info: Mark Finlay, Dept. of History, Armstrong State Univ., Savannah, GA 31419; (912) 921-5642; e-mail: mark-finlay@mailgate.armstrong.edu.

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

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