

# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume 23

1994

Numbers 2-3-4

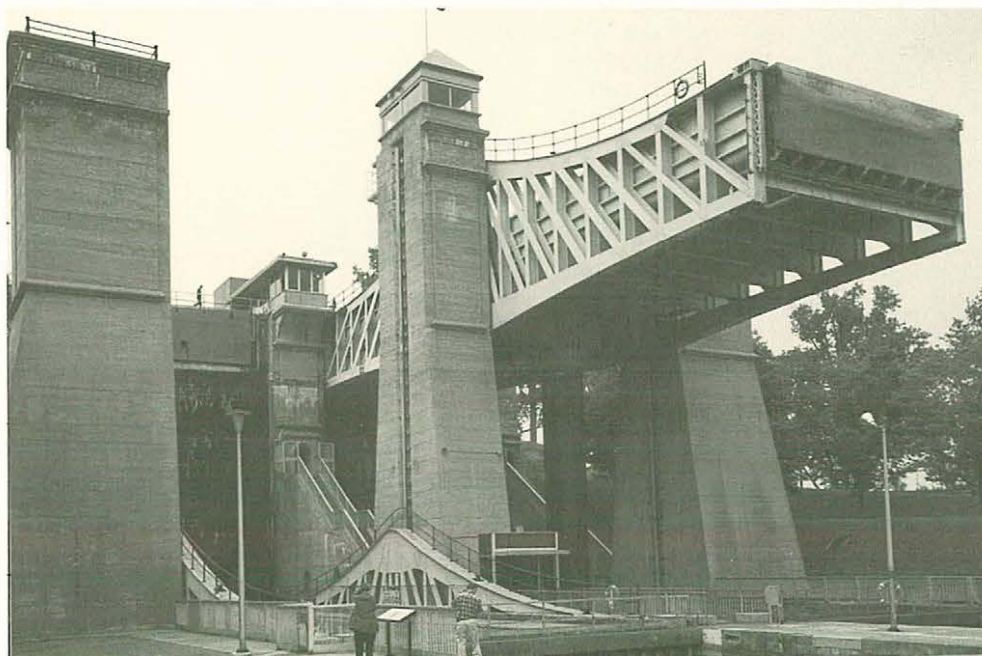
June 2-5, 1994

### SIA explores Toronto during 23rd Annual Conference

TRENT-SEVERN WATERWAY  
HYDRAULIC LIFT LOCK, Peterborough, Ont.

The massive 65-ft. lift (built 1896-1904) is viewed from below (*right*), with the two water-filled chambers in their extreme positions. In the other view (*right below*), photographed from a tour boat in one chamber, the ascending and descending chambers are passing each other.

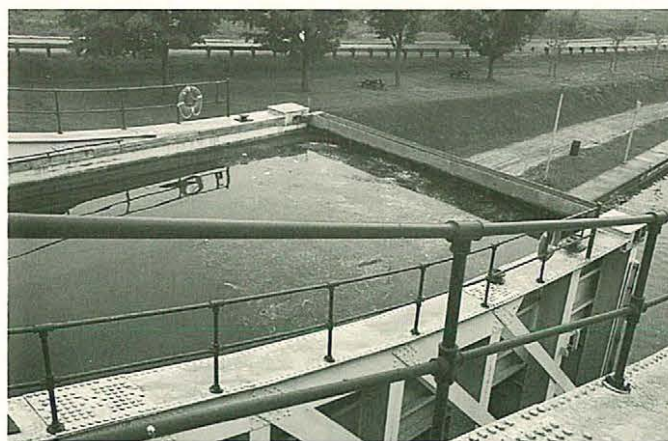
*R. Frame photos.*



Each spring, as the thoughts of the IA faithful turn to touring, the Society faithfully responds by offering the annual conference and tours, filled with enough industrial stimulation to satisfy the longings of the most ardent IA-er. In 1994, the pilgrimage traveled to Toronto for the first time in 19 years, and found an extended weekend of exploration, education, and revelry guaranteed to create many fond memories.

More than 200 participants in the 23rd SIA conference gathered in Canada's largest city on Thursday, June 2. The HQ was the Delta Chelsea Inn, a decidedly non-historic property, which provided easy access to midtown Toronto and—more importantly—adjoined Yonge Street, the home of the city's diverse and fascinating restaurant, retail, and nightlife corridor.

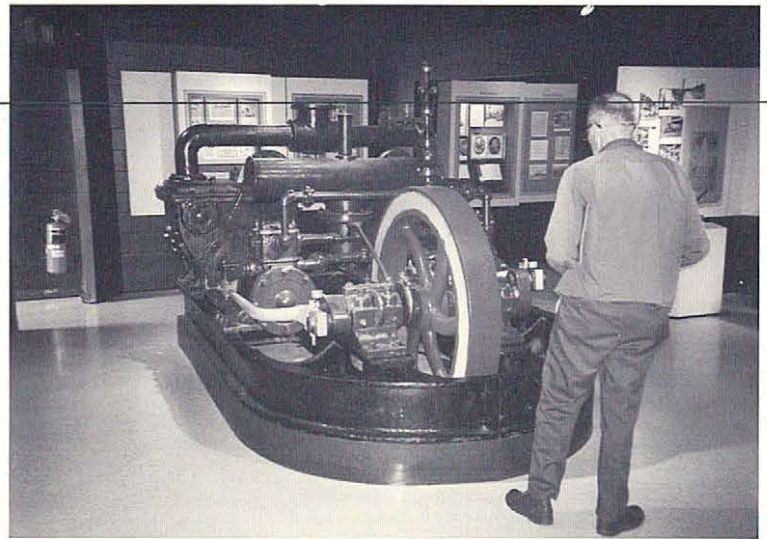
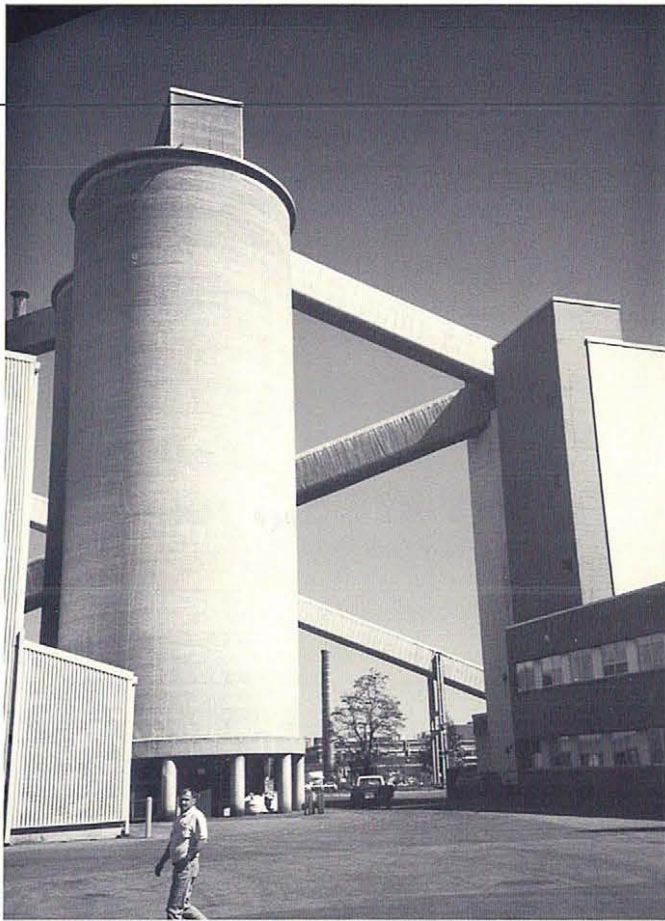
The traditional opening reception Thursday evening took place at the historic **Gooderham & Worts Distillery** complex, a time capsule of 19th-cen. industrial architecture. Billed as the largest distillery in the world in the 1870s, G&W features heavily built and well-detailed processing, storage, and office facilities, most over a century old. (The period landscape is so perfect that the



plant has new life as a movie set.) Surviving interior equipment helps explain the distillation process, little-changed throughout the plant's life. The sweet odor of fermented grain still lingers. The distillery was a favorite site and was revisited by some during Friday's excursions.

Friday morning dawned sunny and mild, as SIA members





REDPATH SUGARS, Toronto

*Left:* Storage silos for refined sugar. The conveyors connect the silos with the packaging and processing buildings.

*Above:* A c1900 steam-powered vacuum pump on exhibit in the Redpath sugar museum located at the processing plant. The pump was manufactured by Guild & Garrison, Brooklyn, and was moved to the museum from the Michigan Sugar Co.'s Caro plant.

*R. Frame photos.*

boarded buses for day-long tours. The seven available itineraries revealed Toronto's diverse IA offerings, while hinting at the heritage that has been lost in recent decades.

The day's most ambitious trip—selected by the hard-core IA-ers—featured a visit to **Hamilton** at the west end of Lake Ontario. Once known as the "Pittsburgh of Canada," Hamilton remains the nation's premier industrial city. The tour included an eclectic sampling of Hamilton's IA legacy, beginning with a visit to the site of the pioneer Crook's Hollow community. Here were the remains of a mill complex dating from 1813, now owned by the Hamilton Region Conservation Authority. Among other attractions were the massive **Westinghouse Canada** complex (a turn-of-the-century manufacturing center for air brakes and electrical components) and the impressive **Gartshore Pumphouse**, heart of the Hamilton waterworks and now fully restored and considered to be one of Canada's finest IA sites. The pumphouse contains an 1858 beam engine and pumps built by John Gartshore at his Dundas, Ont., works.

Meanwhile, those remaining in Toronto boarded tour busses directed in each of the cardinal directions. The "South" tour began by heading into midtown Toronto to explore both historic architecture and modern structural engineering. Stops included the monumental **Beaux Arts Toronto Union Station** (1913-1927), followed by a walk past the impressive (albeit derelict) **John Street Roundhouse** (Canadian Pacific Railway, 1929-31). The tourers then gathered at the unique **Toronto SkyDome** (1989) for a guided tour of that remarkable facility. Regrettably, the building's famous retractable roof remained immobile throughout the tour, and the equally-famous Blue Jays were nowhere to be found.

After lunch at the sprawling **Canadian National Exhibition** grounds, the group returned to Gooderham & Worts for a more in-

depth guided tour. The day concluded with a stroll to the **St. Lawrence Market** (begun 1844), a still-thriving retail establishment. The market's Gallery room featured an exhibition commemorating the construction of Toronto's massive railway viaduct (1925-30).

The "Toronto West" tour route also included the Exhibition grounds, but then diverged to other industrial treats. These included a stroll through a former industrial neighborhood north of the grounds, now the scene of adaptive reuse efforts, and a tour of the nearby **Upper Canada Brewing Company**, a micro-brewery producing suds in the Old World tradition. The group next descended on the plant of **National Rubber**, which has been recycling automotive tire rubber since 1927. Finally, the group visited the Toronto's **High Level Pumping Station**, noteworthy

Toronto's Gooderham & Worts distillery complex, which was the site of the opening reception for the SIA 23rd Annual Conference. *M. Hufstetter photo.*







COMMISSIONERS STREET BLUE BOX MATERIALS RECOVERY FACILITY, Toronto

*Left:* The site's c1955 incinerator, shut down in 1988 and later used as a depot and collection facility for recycling initiatives and now being converted for use as a waste transfer station. *R. Frame photo.*

*Above:* Workers sort plastics, metal, aluminum and glass at the MRF, prior to baling and shipping. *B. Gallaugher photo.*

for its c1910 vertical triple-expansion steam pumping engine.

The day's "Toronto Far North" tour emphasized modern Ontario industry, with a bit of recreated nostalgia for balance. The day began with a stop at the gigantic **Keele Valley Landfill** (1983), a state-of-the-art waste disposal site. Tourers then journeyed from the filthy to the sublime, visiting the **Richmond Hill Live Steamers**, whose members build and operate live-steam models (in five scales) of vintage railway equipment. Next was a visit to the Scarborough plant of electronics giant **Honeywell**, where climate control devices for heating and cooling equipment are manufactured. Finally, for the ultimate in modern (postmodern?) technology, the travelers took a look at the **Pickering Nuclear Generating Station**.

The last of the day's "directional" tours headed east to the museum and refinery (1959) of **Redpath Sugars**, Canada's oldest sugar company. This was followed by a drive through Toronto's

harbor area, a diversified industrial neighborhood built on land largely reclaimed from shallow Lake Ontario wetlands in this cen. The harbor visit also included stops at the **Blue Box Materials Recovery Facility** (1959 & 1988—a former incinerator turned recycling center) and the **R.C. Harris Water Filtration Plant** (1937 & 1958). This tour also concluded with a visit to the **St. Lawrence Market**.

Yet another of Friday's tours headed for the **Don Valley** area, a mixed-use region of industry, museums, and parks. The day began with a stroll through the city's **Ernest Thompson Seton Park**, which included views of a wide selection of historic truss, girder, and beam bridges. The next stop was the **Todmorden Mills** museum complex, developed in a portion of a 200-year-old industrial community, and the former **Don Valley Brickworks**

*Right:* The R.C. Harris Water Filtration Plant, located on Lake Ontario in Scarborough. Built 1937-41 and enlarged in the 1950s, it is Metropolitan Toronto's largest water filtration facility.

*Far right:* 1934 "clock" tower preserved in the Harris plant's filter gallery. Only one face was an actual clock. The other three indicated reservoir levels. During remodeling its function was taken over by the control panel visible in the background. *R. Frame photos.*

*Below:* Toronto's CPR John Street Roundhouse (1929, 1931), closed in 1986, awaits redevelopment. *M. Hufstetler photo.*





(c1890), a deserted industrial site.

The afternoon also included a stop at **Ballmer Architectural Products**, a 125-year-old firm specializing in the creation and restoration of period architectural embellishments. The Don Valley group also ended their day at the old St. Lawrence market.

The conference sponsors also provided a special "Family Tour" on Friday, with stops designed to appeal to IA-er and non-IA-er alike. This tour included visits to the **SkyDome** and to the recording studios of the **Canadian Broadcasting Corporation**. A ferry trip to the Toronto Islands for lunch helped round out the day.

Following Friday's traditional show-and-tell evening, Saturday was devoted to paper sessions, including the **11th Annual Historic Bridge Symposium**. Several papers on international topics were

of particular interest, since this year's SIA events were coordinated with a TICCIH conference and tour in the Montreal-Ottawa-Toronto corridor.

Saturday included the Society's annual business meeting and luncheon. The meal was enlivened by a novel do-it-yourself "centerpiece engineering" competition, which gave those in attendance the chance to demonstrate their frighteningly limited (albeit creative) comprehension of the basic principals of structural engineering. The organization's annual awards were also bestowed at the luncheon. Robert Vogel, one of the SIA founding fathers, received the 1994 General Tools Award.

Saturday concluded with a memorable dinner aboard the steam-powered paddle-wheel ferry **Trillium**. The *Trillium*, constructed in 1910 to link Toronto Islands with the city, was rescued from abandonment in 1974-75, fully restored, and assigned to charter service. As SIA members socialized and enjoyed a buffet supper, the sidewheeler slowly steamed through the Lake Ontario night. The spectacular views of Toronto's night sky competed with the *Trillium*'s vintage engine and steel wheels for the passengers' attention, and it was hard to say which was more favored.

Sunday brought tours of downtown Toronto by foot and light rail, or the option of a day-long visit to Niagara Falls. The latter tour included a winery visit, and tours of the **Welland Canal** and the **Niagara Falls hydroelectric stations**. On Monday, the conference survivors headed to Peterborough to experience the locks and canals of the **Trent-Severn Waterway**.

By all accounts, the SIA's 23rd annual conference was a success, giving participants a weekend of good fellowship and a renewed appreciation of all that Toronto has to offer. Working hard to make the event a success were Christopher Andreae, David Dennis, Mark Fram, Julie Harris, Janis Langins, Marilyn Miller, Phyllis Rose, and Richard Strombert. Special thanks go to the Institute for the History and Philosophy of Science and Technology (IHPST) at the Univ. of Toronto, the Toronto Historical Board, the Ontario Ministry of Culture, Tourism and Recreation, the Ontario Society for Industrial Archaeology, and Drivers Jonas. M.H.



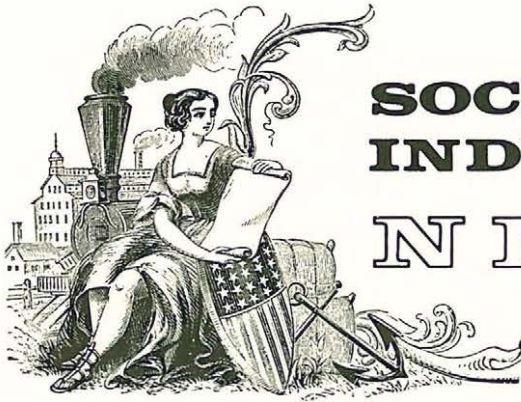
*Above:* A conference walking tour views the historic buildings and facades preserved within and around the soaring architecture of BCE Place, located in Toronto's financial district.

*M. Hufstetler photo.*

*Right:* The restored Lang Grist Mill (1846), Lang Pioneer Village, Peterborough County, is located on the site of David Fife's farm, where he developed a revolutionary spring wheat in 1842. Red Fife wheat dominated Canadian agriculture for 60 years and was a parent of Marquis wheat. *R. Frame photo.*







# SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

PUBLICATIONS OF INTEREST

A SUPPLEMENT TO VOL. 23, NO. 2-3-4.

1994

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## GENERAL STUDIES

Marty Blatt. "America's Labor History: The Lowell Story." In *CRM* 15:5 (1992), p. 1-5. A brief introduction to current preservation and interpretation activities at Lowell.

C. S. Briggs. **Welsh Industrial Heritage: A Review.** Council for British Archaeology (Bowes Morrell House, 111 Walmgate, York YO1 2UA, G.B.). ISBN: 1-87414-43-5, £32. Updates Morgan Rees' pioneering work of 1975 on Welsh industrial archeology.

R. Bruce Council, Nicholas Honerkamp, and M. Elizabeth Will. **Industry and Technology in Antebellum Tennessee: The Archaeology of Bluff Furnace.** Univ. of Tenn. Pr. (Knoxville), 1992. 227p., illus., bibliog., index. \$42.50 hb, \$18.95 paper. The exhumation of artifacts at the furnaces of the East Tennessee Iron Manufacturing Co.; according to the reviewer, a "tangible demonstration" of the fact that industrial archeology "has a great deal to offer." Rev.: *BRH* (Summer 1993), p. 309-311.

*The following series is written and compiled by the Panel for Historical Engineering Works of the Institution of Civil Engineers. Avail. from Thomas Telford Services, Ltd., 1 Heron Quay, London E14 4JD.*

**Civil Engineering Heritage: Southern England.** £12.50. Covering Cornwall to Kent, including Somerset and parts of Wiltshire and Surrey, incl. such sites as Smeaton's Eddystone Lighthouse and the Royal Albert Bridge over the Tamar at Saltash.

**Civil Engineering Heritage: Eastern & Central England.** £12.50. From the Humber to the Thames and East Anglian Coast to Central England, this guide explores the achievements of such famous names as Brindley, Jessop and Outram for canals, and the Stephenson and Cubitts for railroads.

**Civil Engineering Heritage: Wales & Western England.** £8.75. Incl. the Severn Valley, The Black Country, Staffordshire and Cheshire.

**Civil Engineering Heritage: Northern England.** In a new ed. planned for 1995, this vol. covers the north of England from Mersyside and South Yorkshire up to the Scottish border.

## ELECTRICITY & POWER GENERATION

Jonathan Coopersmith. **The Electrification of Russia, 1880-1926.** Cornell Univ. Pr. (Ithaca, NY), 1992. 274p., illus., index. \$39.95. Engineering and socialism combined in Russia's first large-scale industrial plan. Rev.: *BRH* (Summer 1993), p. 361-363.

Keith R. Fleming. **Power at Cost: Ontario Hydro and Rural Electrification, 1911-1958.** McGill-Queen's Univ. Pr. (Montreal), 1992. 326p., illus., maps, bibliog., index. \$42.95. Rev.: *BRH* (Summer 1993), p. 337-339.

N. Hawkins. **New Catechism of the Steam Engine.** Astragal Pr. (P O Box 239, Mendham, NJ 07945-0239). 437 p., illus. Reprint of turn-of-the-century bible on steam power. Many engravings and detailed technical descriptions on steam power devices from Corliss, McIntosh & Seymour, and Porter-Allen engines to Conover independent jet condensers. Also included are the Otto gas engine, Simplex naphtha engine, and Delamater-Rider hot-air engine.

Berthold Moog. **The Horizontal Watermill: History and Technique of the First Prime Mover.** The Int'l Molinological Soc. (TIMS Publications Officer, Mr. Tjerk Oosterhuis, Hondsdraf 17, NL-3738TB Maartensdijk, The Netherlands), 1994. 96 p., illus., bibl. ISBN: 92-9134-017-0. Examines development and geographical distribution of the "usually unpretentious" horizontal type (with vertical shaft) watermill, which preceded the more well-known vertical type (with horizontal shaft). Discusses technical aspects of waterwheels, blade design, energy conversion and flow control in detail.

## INFORMATION TECHNOLOGY

Clayton M. Christensen. **"The Rigid Disk Drive Industry: A History of Commercial and Technological Turbulence."** In *BRH* 67 (Winter 1993), p. 531-588. Technological and marketplace changes in the manufacture of computer hard disks.

David L. Morton. **"The Rusty Ribbon": John Herbert Orr and the Making of the Magnetic Recording Industry, 1945-1960.** In *BRH* 67 (Winter 1993), p. 589-622. The early technology of magnetic recording tape.

## MARITIME

Candace Clifford. **"Preserving Lighthouses: Historic Lighthouse Inventory."** In *CRM* 16:7 (1993), p. 1-7. Discussion of a lighthouse inventory by the National Maritime Initiative, a program of the National Park Service. Also incl. "Restoring a Landmark Lighthouse in South Florida."

Fred Neuschel. **Tree Captains of Lake Michigan.** 52p., illus. Avail.: \$5.10 ppd., from the author (1753 Prospect Ave., Des Plaines IL 60018). The story of two brothers, both schooner captains, who drowned in the wrecks of their Christmas tree-laden vessels. Incl. a general history of this unusual Great Lakes cargo.

## TOOLS AND TOOLMAKING

*The following 5 items are available from Astragal Pr., P O Box 239, Mendham NJ 07945-0239.*

Kenneth L. Cope. **American Machinist's Tools: An Illustrated Directory of Patents.** 424 p., illus., index. \$29.95. Contains over 1,000 diagrams illustrating machinist's tools patented through 1905 and between 1906 and 1916, incl. jointed or spring calipers, beam calipers and compasses, centering tools and gages, levels, rules, and squares. Indexed chronologically, by patentee name, and by type of tool.

Alexander Farnham. **Search for Early New Jersey Toolmakers.** 160 p., illus. \$25. Discusses planemakers, edge tool makers, rule manufacturers, wrench makers, etc., discovered since author's first book on subject, **Early Tools of New Jersey and the Men Who Made Them.** Cos. covered incl. Heller Bros., Heinisch, Ward & Co., Gage Tool, Mockridge and Francis.

Emil and Martyl Pollak. **A Guide to American Wooden Planes and Their Makers, 2nd ed.** 427 p., illus., bibliog. \$25. Considered a standard reference, at least by plane collectors, this revised guide contains over 1,660 biographical entries, 1,330 illustrated makers' marks, 600 wedge outlines, a short history of planemaking, and a glossary.



James E. Price. **A Sourcebook of U.S. Patents for Bitstock Tools & the Machines that Made Them.** 173 p., illus., index. \$23.50. 721 patents for all types of bitstock tools, incl. augers, screw taps, washer cutters, bit levels and inclinometers, balance weights, chain drills, and depth stops and gauges. Indexed in chronological order, by patentee, by place of origin, and by type of tool.

John M. Whelan. **The Wooden Plane: Its History, Form & Function.** 1993. 513 p., illus., index. Illustrates and classifies not only American and English planes, but those of French, Dutch, German, Japanese and Chinese manufacture, supplemented by five glossaries in corresponding languages. Describes and explains planes used by specific trades: cooper, sashmaker, coachmaker, patternmaker, organ builder, staircase builder, etc.

#### MINING AND RELATED INDUSTRIES

Thomas W. Dixon, Jr. **Appalachian Coal Mines and Railroads.** TLC Publishing (Rt. 4, Box 154, Lynchburg VA 24503), 1994. 80p., illus. \$18.95 pd. "A photo-history of coal, from mine to market, in the Appalachian coal regions." Incl. scale drawings of typical mine structures.

Carolyn V. Platt. "Salt," in *Timelines* 12 (March/April 1995), p. 16-25. The history and technology of early salt production in eastern Ohio; interesting historic photographs and diagrams.

Lawrence H. Wickstrom and John D. Gray. "Boom Towns: Oil and Gas in Northwestern Ohio." in *Timelines* 11 (November/December 1994), p. 2-15. A look at late-19th cen. energy extraction in the Findlay and Lima, Ohio areas. Many period illustrations.

#### MISC. INDUSTRIES

Ralph W. Andrews. **This was Logging.** Astragal Pr. (P O Box 239, Mendham NJ 07945-0239). 157 p., illus. \$12.50 Documents the heyday of logging in the Pacific Northwest through reproductions of over 200 wet-plate photographs taken between 1890 and 1925 by Darius Kinsey.

Jerry Apps. **Breweries of Wisconsin.** Univ. of Wisconsin Pr. (Madison), 1992. 252p., illus., bibliog., index. \$29/20 pap. A popular history of that which made Milwaukee famous. Incl. info. on the process of commercial beer-making. Rev.: *BRH* (Autumn 1993), p. 469-470.

G. G. Astill. **A Medieval Industrial Complex and Its Landscape: The Metalworking Watermills and Workshops of Bordesley Abbey.** Council for British Archaeology (Bowes Morrell House, 111 Walmgate, York YO1 2UA, Gt. Brit.). ISBN: 1-872414-43-5, \$32. Report of four watermills used from late 12th cen. to early 15th cen. exclusively for providing power for metalworking, and representing earliest evidence for water-powered metalworking in England.

Simon Woodiwiss, ed. **Iron Age and Roman Salt Production and the Medieval Town of Droitwich.** Council for British Archaeology (Bowes Morrell House, 111 Walmgate, York YO1 2UA, Gt. Brit.) ISBN: 1-872414-24-9, \$32. This report on Droitwich, a major center for salt production since the Iron Age, provides info. on early technology of the salt industry and development of the Saxon and Medieval town.

#### MILLING

K. T. Achaya. **Ghani: The Traditional Oilmill of India.** Olearius Editions (P O Box 906, Arlington VA 22216-0906), 1993. 128 p., illus., index, bibliog. ISBN: 0-917526-05-8. Traces history of the ghani, a sophisticated, animal-powered mechanical device, resembling a large mortar and pestle, from Vedic mythology to the present. Examines regional differences in ghani design, basic principles of oil extraction, how procedures vary for different oilseeds, and recent efforts to improve efficiency by adding electrical power.

Raphael Frankel, Shmuel Avitsur, and Etan Ayalon. **History and Technology of Olive Oil in the Holy Land.** Olearius Editions (P O Box 906, Arlington VA 22216-0906), 1994. 208 p. illus., index, bibliog. ISBN: 0-917526-06-6, \$40. Detailed exploration of many methods, both traditional and industrial, used to produce olive oil in the Holy Land from Biblical and Talmudic times through the 20th cen. Incl. examination of cultural history of olive oil in daily life and an account of reconstruction of a traditional olive oil plant at Tel Aviv's Eretz Israel Museum.

Philip Rahtz and Robert Meeson. **An Anglo-Saxon Watermill at Tamworth.** Council for British Archaeology (Bowes Morrell House, 111 Walmgate, York YO1 2UA, G.B.). ISBN: 0-906780-94-2, \$28. Report on 1971 and 1978 excavations of two successive late Anglo-Saxon horizontal-wheeled watermills. Provides insights into carpentry techniques and the technology of milling.

Zaphyris Vaos & Stephanos Nomikos. **Windmills of the Cycladic Islands.** Dodoni Editions (3, Asklipiou St., 109 79 Athens, Greece),

1993. 406 p., illus., maps, index, bibliog. \$80 pd. In Greek, with an English summary, this history examines mill architecture and construction, millstones, financial aspects of operations, and windmill law, as well as folklore associated with milling in the Cyclades. Incl. glossary of 750 milling terms.

#### RAILROADS

Gerald Berk. **Alternative Tracks: The Constitution of American Industrial Order.** Johns Hopkins Univ. Pr. (Baltimore), 1994. 243p., \$35.95. An academic analysis of the evolving historical relationship between American industry and federal regulation. Railroadng (in particular, the Chicago Great Western) is the case study. Rev.: *The Lexington Qlty* (January 1995), p. 6-7.

D. C. Jesse Burkhardt. **Backwoods Railroad: Branchlines and Shortlines of Western Oregon.** Oregon Historical Society (OHS Museum Store, P O Box 4500-73, Portland OR 97208). Illus. \$45. Profusely illustrated account of western Oregon branchline and shortline railroads.

William F. Deverell. **Railroad Crossing: Californians and the Railroad, 1850-1910.** Univ. of California Pr. (Berkeley), 1993. 177p., bibliog., index. \$28. A social history, examining "the varieties of railroad antagonism" in the Golden State. Rev.: *The Lexington Qlty* (January 1995), p. 8-9.

James D. Dilts. **The Great Road: The Building of the Baltimore & Ohio, the Nation's First Railroad, 1828-1853.** Stanford Univ. Pr. (Stanford CA), 1993. 472p., photos, maps, index. \$60. Thorough and well-done history of the early B&O, and its impact on the region through which it was built. Rev.: *The Lexington Qlty* (Jan. 1995), p. 10-12; *BRH* (Winter 1993), p. 645-7.

George H. Drury. **Guide to North American Steam Locomotives: History and Development of Steam Power Since 1900.** Kalmbach Publ. Co. (Waukesha, WI), 1993. 448p., illus., bibliog. \$24.95 pap. A summary almanac of the continent's 20th-cen. steam locomotives, arranged by carrier and builder. Rev.: *The Lexington Qlty* (January 1995), p. 1-2.

Colleen A. Dunlavy. **Politics and Industrialization: Early Railroads in the United States and Prussia.** Princeton Univ. Pr. (Princeton NJ 08540), 1994 303p. \$39.50. A comparative look at how two 19th-cen. governments affected (and were affected by) the development of railways in their nations. Rev.: *The Lexington Qlty* (Jan. 1995), p. 12.

George Krambles and Arthur H. Peterson. **CTA at 45.** (CTA at 45, P.O. Box 3845, Chicago IL 60306-3845), 1993. 144p., illus., maps. \$45. A well-done history of the Chicago Transit Authority, and its revitalization of the Windy City's mass transit infrastructure. Rev.: *The Lexington Qlty* (Jan. 1995), p. 5-6.

Patricia Nelson Limerick. "The Final Frontier?" In *The Wilson Qlty* 14 (Summer 1990), 82-83. The first transcontinental railroad as an example of poor planning.

Douglas C. "Duffy" Littlejohn. **Hopping Freight Trains in North America.** Sand River Pr. (1319 14th Street, Los Osos CA), 1993. 353p. \$16 ppd. A travel guide for those times when Amtrak just isn't convenient. Rev.: *The Lexington Qlty* (Jan. 1994), p. 9-10.

Dale Martin. "Railroading on the Great Divide: Images of the Milwaukee Road's Western Main Line." In *Montana* 43 (Spring 1993), 52-61. A photographic and textual appreciation of the Milwaukee Road's Pacific Coast Extension.

Sig Mickelson. **The Northern Pacific Railroad and the Selling of the West.** The Ctr. for Western Studies (Sioux Falls, SD), 1993. 232p., illus., bibliog. \$12.95 pap. Using primary sources, examines the Northern Pacific's attempts to lure 19th-cen. settlers to the northern plains. Rev.: *The Lexington Qlty* (January 1994), 5-6.

Alfred C. Mierzejewski. "The German National Railway Company, 1924-1932: Between Private and Public Enterprise." In *BRH* 67 (Autumn 1993), p. 406-438. German railroads during a period of public ownership and private operation.

Charles T. Morrissey. "More than Embers of Sentiment: Railroad Nostalgia and Oral History Memories of the 1920s and 1930s." In *Public Historian* 15 (Summer 1993), 29-36. "Oral history ... tempering nostalgia by recovering the vexations of painful experiences."

Abbreviations used in this P of I:

**BRH** = *Business History Review*



# SIA AFFAIRS

## ANNUAL BUSINESS MEETING 23RD ANNUAL CONFERENCE JUNE 4, 1994

The meeting was called to order by SIA President Amy Federman at 1:10 p.m. in the ballroom of the Delta Chelsea Hotel, Toronto, Ontario.

**PRESIDENT'S REPORT.** President Federman thanked all for organizing and participating in the conference. She conveyed a variety of news updates on official acts taken by the Board to continue Society programs. She made special note of the contributions of Jane Carolan, Sandy Norman, Henry Rentschler, David Starbuck, David Shayt, Helena Wright, and Phyllis Rose.

**SECRETARY'S REPORT.** Secretary David Shayt requested approval of the minutes of the 1993 annual business meeting. Motion by David Simmons, second by Carter Litchfield, that the minutes of the 1993 annual business meeting be approved. Motion carried by acclamation.

Multiple hands rose when the Secretary asked how many of those present also had been at the 1976 SIA fall tour in Toronto and at both Pittsburgh conferences (1974 and 1993).

### **TREASURER'S REPORT.** As of Dec. 31, 1993:

Total assets	\$ 94,580
Total liabilities & fund balances	94,580
Total Income	75,435
Total operating expenses	-59,126
Fund balance increase	\$16,309

**NORTON PRIZE.** Norton Prize Committee Chair Dean Herrin rose to announce the winner of the 1994 Norton Prize: Tom Leary, for his article on the steel rolling-mill process. Other members of the committee were Duncan Hay, Larry Gross, Carter Litchfield, and Carroll Pursell. The winner rose to express thanks and express the need to continue to go in "harm's way" (onto the shop floor) to get to the real meaning of industrial archeology.

**GENERAL TOOLS AWARD.** General Tools Award Committee Chair Terry Reynolds rose to announce the recipient of the 1994 General Tools Award: Robert M. Vogel. The recipient assumed the podium to accept the General Tools plumb bob, to the loud applause of the assembled members.

**OTHER AWARDS.** Roger Dorton of the Canadian Society of Civil Engineers rose to announce that conference organizer and SIA member Phyllis Rose was the recipient of the CSCE's 1994 History of Civil Engineering Award. Rose rose to accept the award and to thank CSCE and SIA.

Christopher Andreae rose to announce the winners of the luncheon table centerpiece engineering awards. Prizes then were handed to five table winners in the following categories: relevance to IA, full-table participation, enthusiasm, creativity, and structural strength. (Winning entries later were sent, by hotel staff, to a Toronto land fill.)

**ELECTION RESULTS.** Nominations Committee Chair Sandy Norman rose to announce the results of the 1994 election of Society officers and other key people:

Vice President:	<b>Fredric Quivik</b>
Treasurer:	<b>Nanci K. Batchelor</b>
Secretary:	<b>Richard K. Anderson, Jr.</b>
Director:	<b>Christopher Marston</b>
Nominations Committee:	<b>Mary E. McCahon</b>
TICCIH Representative:	<b>Peter H. Stott</b>

The new officers having been announced, incoming president Duncan Hay assumed the chair of the meeting to formally thank outgoing president Amy Federman for her service to the Society. There being no further business, President Hay adjourned the meeting.

*Respectfully submitted,  
David H. Shayt  
Outgoing Secretary*

## 1994 General Tools Award



Robert M. Vogel proudly displays his General Tools Award for Distinguished Service to Industrial Archeology.

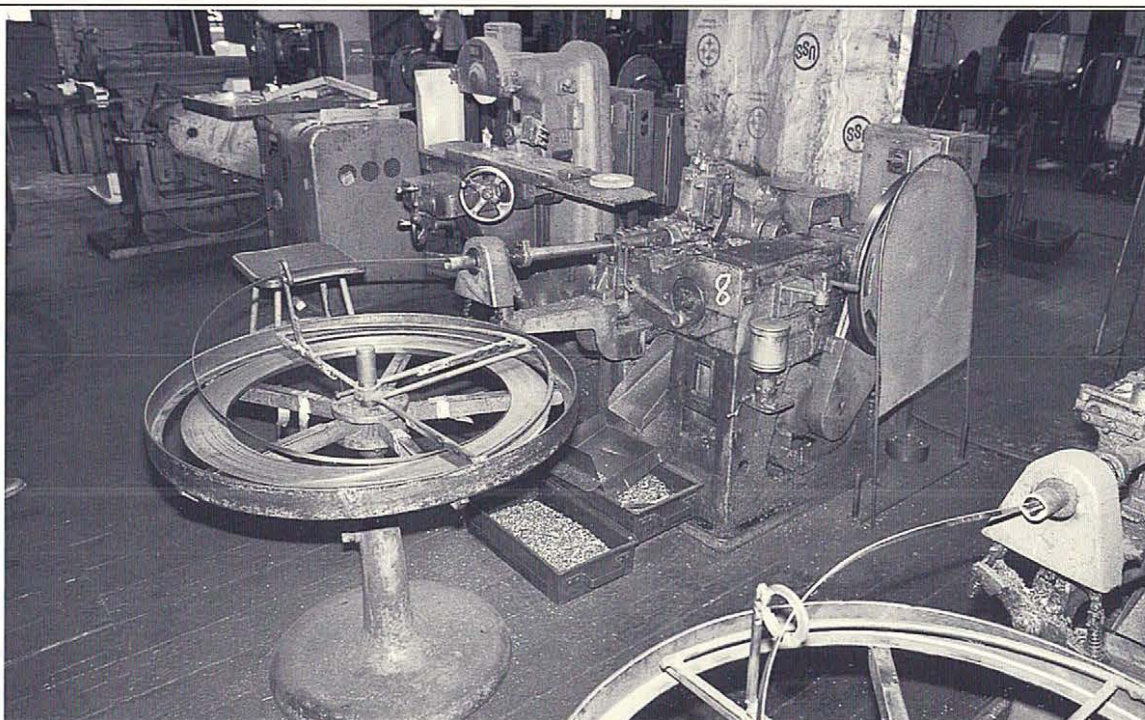
Robert M. Vogel received the 1994 General Tools Award for Distinguished Service for Industrial Archeology at the Society's 23rd Annual Conference in Toronto. Terry S. Reynolds, chair of the award committee, made the presentation and cited Vogel's many contributions to IA and the SIA, including Robert's pivotal role in the 1971 founding of the Society and his later service as newsletter editor (1972-79), director, and president (1980-81). For a full discussion of his many other contributions and accomplishments, readers are directed to the article on "The Life & Times of Robert M. Vogel, Ret.," in the Fall 1988 *SIA Newsletter*.



## SIA tours Madison, Indiana, & Schroeder Saddletree factory

The Tower Manufacturing Co. utilizes this half-century-old tack cutting machine to convert an iron ribbon into half-inch tacks.

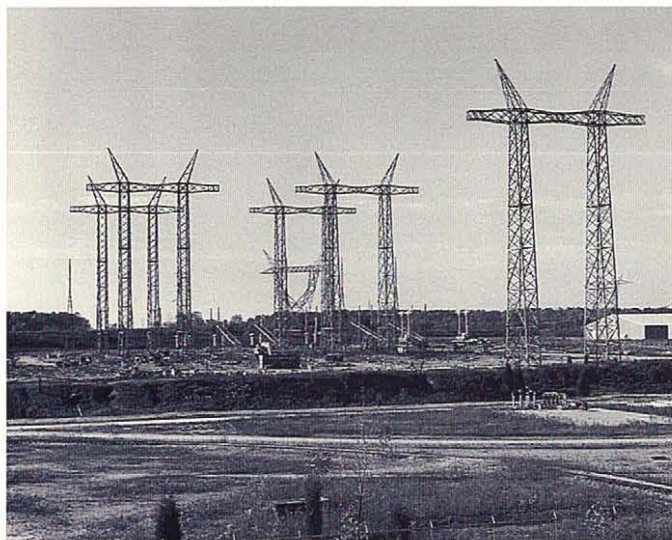
*Carter Litchfield photo.*



Historic Madison Foundation hosted 75 hardy SIA tourers for the Society's 1994 Fall Tour, October 20-23, in Madison, Ind.

The weekend began with a welcome to Madison's 19th-cen. manufacturing center by HMF president John Galvin. The next morning, Friday, tour buses began the day's site visits with a stop at the **Jefferson Proving Ground**, established in 1941 to test ordnance for the U.S. War Dept. The last test round was fired on Sept. 30, only weeks before the Fall Tour, and the 55,000-acre base now is being closed. Buildings visited included the shop for wear-testing gun tubes, where we watched a gun tube being bore-scoped for fractures.

The group next visited **Grote Industries'** 440,000-sq. ft. manufactory and testing lab for truck and auto lighting and safety systems. Walter Grote Sr., son of the company founder, invented the automatic plastic injection molding machine and built the first one in the U.S.



The Friday lunch stop included a walk to the remnants of a partially completed 1850s railroad tunnel, which was part of a failed attempt to provide a second line from Madison and the Ohio River floodplain to the top of surrounding hills.

In the afternoon there was a trip to **Tower Manufacturing**, one of three U.S. firms still making cut tacks. The plant is in an 1884 structure built for a starch works. The equipment was run from line shafting as recently as 1972, when individual motors were installed.

The **Marble Hill Nuclear Power Plant**, its construction halted in 1984, was the day's fourth site. Located in rural Indiana, outside Madison, the plant offered tourers the rare opportunity to explore the interior of a reactor containment building, complete with its polar crane. We also visited warehouses where materials salvaged from the project are stored. Of particular interest was the 5,000 hp. diesel engine/generator designed to provide backup power in an emergency.

Friday night videos of early Madison movies rounded out the day. Included were clips of Tower Manufacturing and a local slaughterhouse disassembly line, both in the 1930s.

Saturday was spent largely in Madison's 133-block National Register Historic District--virtually the entire downtown. The featured site was the nationally significant **Ben Schroeder Saddletree Factory** [HAER], now being studied for possible restoration. It is the last known 19th-cen. saddletree factory in the U.S. and contains a collection of wood- and metal-working equipment, including many unique pieces used in manufacturing the saddletrees, the internal wooden frames of riding saddles.

Following a drive-by of the remnants of the **Pearl Packing Plant**, Madison's last slaughterhouse, we visited the **Lamson**

Steel-frame towers, designed to carry high-tension wires, stand idle outside the uncompleted Marble Hill Nuclear Power Station, producing an eerie "sculpture garden" for the industrial archeologist. *Carter Litchfield photo.*



*Right:* The Lamson Feed Mill & Feed Store in Madison custom-grinds corn, oats, and soybeans for local farmers. The top of the 110-ft. grain elevator is visible at the rear of the mill.

*Below:* A finished saddletree manufactured at the Schroeder Saddletree Factory in Madison. This internal frame for a top-of-the-line saddle was constructed of wood and metal and then covered with raw cowhide. Both western (shown here) and English-style saddlestrees were made at the Schroeder works.

*Below right:* When the demand for saddlestrees declined, the Schroeders turned to other manufacturing activities. From 1935 to 1942 they produced clothespins on this clothespin lathe, made by the Goodspeed Machine Co., Winchendon, Mass.



*Carter Litchfield photos.*



**Feedmill**, which mixes and processes feed for area farmers. Joe and Loren Lamson demonstrated the equipment and custom-built elevator and storage system.

Saturday's hardhat lunch was in the 1884 Eagle Cotton Mill, which tourers explored, along with the nearby 1929 truss bridge—for many years the only Ohio River span between Cincinnati and Louisville.

Later, tour-goers hiked up part of a **Madison railroad grade** that, at 5.89%, is the steepest section of standard-gauge, line-haul track ever constructed in the nation. Meanwhile, others visited the Jefferson County Historical Society, which includes the 1895 Madison railroad station.

The day's final visit was to the **Clifty Creek power plant** of the Indiana-Kentucky Electric Corp., which, with its sister plant near Gallipolis, Ohio, are unique in having one primary customer:

the Portsmouth Area uranium-enrichment complex. The tour included the control and turbine rooms.

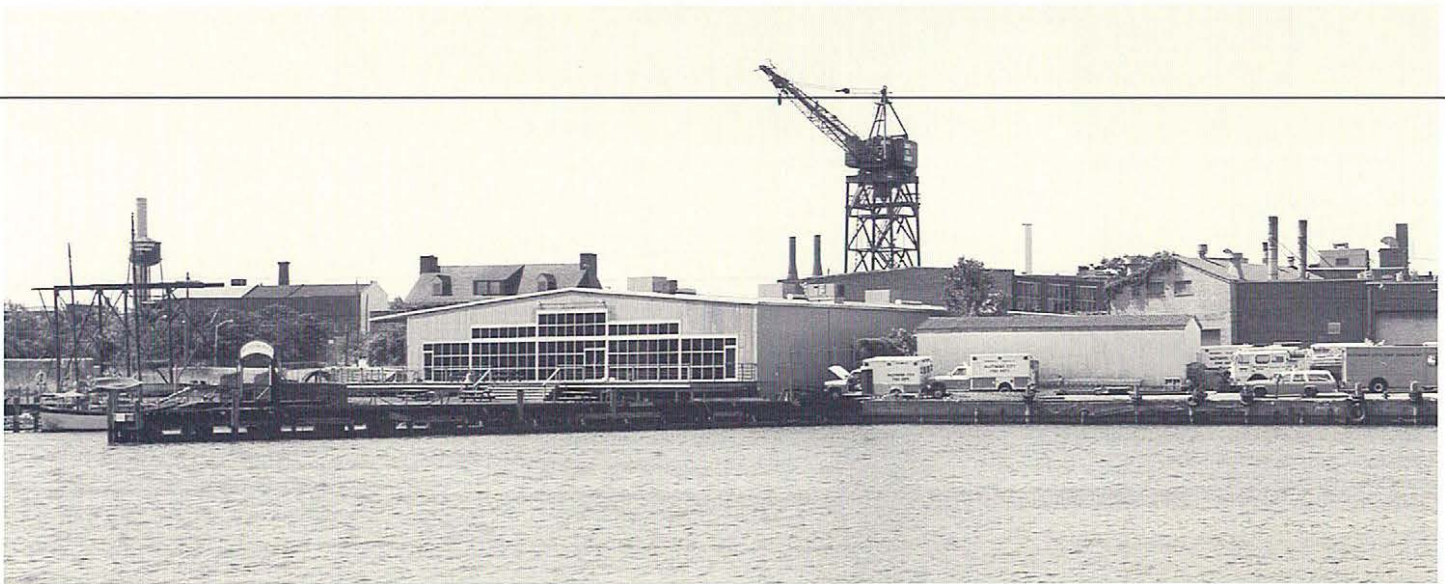
A Saturday evening reception was held at the classical revival Shrewsbury House, a National Landmark site.

The Fall Tour concluded on Sunday with several optional programs. Some returned to the Schroeder factory and its artifact collection for a closer look. Others took a walking tour of downtown Madison. There also were tours to additional sites, including the **Cunningham Tin Shop**, the **Early American Trades Museum**, and several historic house museums.

Special thanks for producing the Fall Tour go to the board and staff of HMFI and tour co-chairs Bill McNiece and John Staicer. A limited number of tour guidebooks are available for \$5.25 + post. from Staicer, HMFI, 500 West St., Madison IN 47250 (812-265-2967).

*J.S.*





Harbor view of the Baltimore Museum of Industry. Rising high above the site is the Clyde Whirly crane. Ron Solomon photo for Baltimore Museum of Industry.

*Get the score in Baltimore — the IA score, that is . . .*

## **SIA schedules tours of RR, food, metals, printing, & garment IA**

Once known as Baltimore Town, chartered by the Maryland General Assembly in 1729, the small bustling port at the headwaters of the north branch of the Patapsco River saw its economic base broaden from shipping to manufacturing. By 1825 Baltimore was the second largest city in the U.S. From May 11 to 14, SIA members will converge on Baltimore to participate in "Port, People and Process: Baltimore's Industrial Heritage," at the Society's 24th Annual Conference.

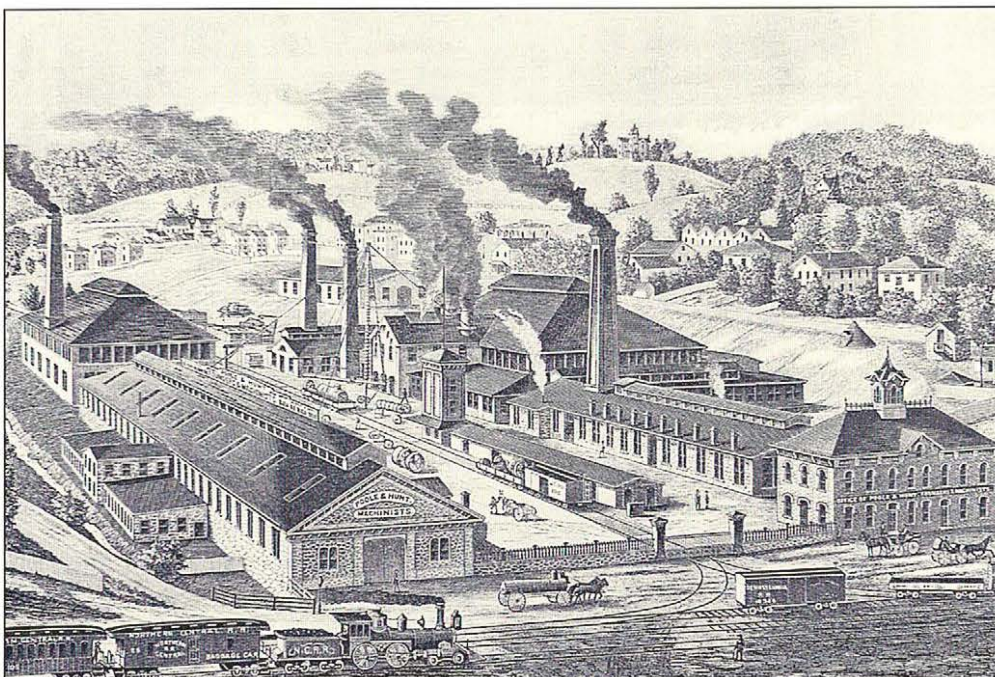
The B&O Railroad Museum will host the opening reception on Thursday, May 11. The first passenger train in the western hemisphere headed west to Ellicott's Mills from the B&O's Baltimore terminus in 1830.

Five thematic process tours will be offered on Friday, May 12.

The Food Processing Tour will include Wilkins-Rogers flour mill in Ellicott City and Domino Sugar Corp. There also will be a Transportation Tour, a Metal & Mechanical Tour, a Printing Industry Tour, and a Garment Industry Tour, which will include Joseph A. Banks clothiers and Lion Brothers Co., makers of embroidered emblems.

On Saturday, May 13, the Baltimore Museum of Industry will host a tour of the facility, followed by a crab feast at a site overlooking Baltimore's harbor. The tour will include The Kids' Cannery, winner of the prestigious Dibner Award for children's exhibits, and BMI's 1906 steam-powered tug *Baltimore* (NHL).

Tours by land and by sea on Sunday, May 14, will include Baltimore's port and industrial sites, and the communities of Fells



Birds-eye view of the Poole and Hunt foundry and machine works, Woodberry.

Thomas Scharf, *History of Baltimore* (1881).





Left: The B&O Railroad Museum at Mt. Clare. *B&O Railroad Museum photo.*

Above: BMI's 1906 Steam Tug *Baltimore*. *Doug Barber photo for Baltimore Museum of Industry.*

Point, Little Italy, Canton, and Gwynns Falls. Monday's post-conference tour will go to Calvert County and include a stop at the Calvert Marine Museum.

The Radisson Plaza Lord Baltimore Hotel will be the conference HQ. Built in 1928, the Lord Baltimore is a registered historic landmark and is within walking distance of the Inner Harbor.

## NOTES & QUERIES

**HISTORIC SPANS AVAIL.** The Maryland State Hwy. Admin. is requesting expressions of interest from parties for the removal and reuse of the **Weems Creek Bridge**, a 1929 pony truss swing-span in Annapolis. The span is 23 ft. wide curb to curb with no sidewalks. The 96-ft. movable span is comprised of two steel pony trusses with a timber deck on steel beams and is supported on a central concrete pier. The approach spans are steel stringers with concrete deck on a timber pile substructure. The approach spans cannot be salvaged intact.

The swing span will be donated to any public agency, private organization, or individual willing to preserve it. It is eligible for the National Register and will be documented to HABS/HAER standards by the time of the move. The construction of a replacement span is scheduled to begin on Oct. 1, 1995. The span must be removed between Sept. 5 and Oct. 1.

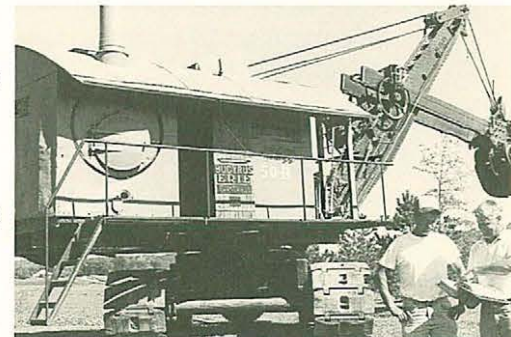
MSHA also is requesting expressions of interest in the removal and reuse of the **Tilghman Island Bridge**, a 1934 Sherzer rolling lift bridge that connects the mainland of Talbot County with Tilghman Island. This structure consists of a 53-ft. single-leaf bascule span and approach spans. The roadway width is 20 ft. The bascule span has an open steel-grate deck. The construction of a replacement structure is scheduled for fall 1995 and the existing span would be removed upon completion. The new owner must remove it by late fall 1996.

Those interested in either of the two spans should contact the SHA and request an information packet immediately. The proposed relocation site will be reviewed by the Md. Historical Trust, which will require a preservation easement. For additional info. contact Louis H. Ege, Jr., Deputy Dir., Office of Planning & Preliminary Engineering, MSHA, Box 717, Baltimore MD 21202.

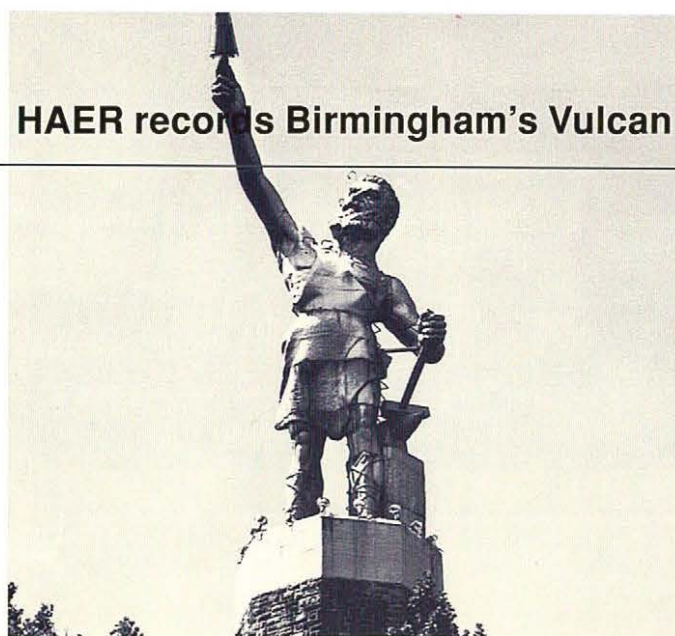
**HISTORICAL CONSTRUCTION EQUIP. ASSN.** members exhibited some 144 pieces of old and unusual equipment at their 9th annual convention and 3rd outdoor equipment show in Sept. The event was held at the Bellevue Sand & Gravel, Inc., site on the Ohio River at Petersburg, Ky. Dubbed the convention "sandbox," the area was extensive enough to allow operation of even the largest machines. Included were a 1922 Linn halftrack truck, a TD7 International bulldozer, a rare 1931 LeBlond Schact dump truck built in Cincinnati, a 1938 Allis Chalmers M bulldozer with a Baker blade, and a restored 1926 K-2 Link Belt "Big Bertha." BS&G owner and convention co-chair Bill Rudicill exhibited his collection of Bucyrus-Erie equipment, including a 1929 BE 50-B steam shovel. Info.: HCEA, POB 328, Grand Rapids OH 43522.

Right: HCEA convention co-hosts Jim & Bill Rudicill with Bill's 1929 Bucyrus-Erie 50-B steam shovel.

Below: The "sandbox" - Bellevue Sand & Gravel, Inc., Petersburg, Ky., provided an apt setting to operate historic heavy construction equipment. Visible at center is the 1922 halftrack truck.







Vulcan, the world's largest cast-iron statue, was part of the 1993 summer recording of the Historic American Engineering Record. Birmingham, Alabama's 55-ft.-high statue is second in America only to the 155-ft. Statue of Liberty.

The work was conceived in 1904 by firms in Birmingham, which then was emerging as the south's iron and steel center. Molded in heroic fashion after the Roman god of the forge by Sienese immigrant sculptor Giuseppi Moretti (1857-1935), Vulcan was intended to promote the city's iron industry at the 1904 Louisiana Purchase Centennial Exposition in St. Louis.

The pit casting was a technical feat, with some sections weighing 12,000 pounds and measuring 20 ft. in diameter. From small plaster model to final assembly in St. Louis, the work took four months. Other sculptors, including Cyrus Dallin, had rejected the task as a four-year project.

After St. Louis, the statue suffered thirty years of indignity at the Alabama State Fairgrounds, where its arms were incorrectly attached and it was made to hold advertising props such as ice cream cones and pickle jars. In 1935 the WPA moved Vulcan to a landscaped park on Red Mountain, overlooking Birmingham.

Modifications over the years, including a neon-lit torch in the upraised hand, have affected the statue's integrity. Restoration efforts, based on structural analysis and HAER's report, are under consideration.

M.A.K.

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## CALENDAR

**May 11-14, 1995:** 24th SIA Annual Conference, Baltimore. Info.: Baltimore Museum of Industry, 1415 Key Hwy., Baltimore 21230.

**June 9-16:** "Preservation of Industrial Cultural Landscapes - Chances & Risks," TICCIIH Intermediate Regional Conf. 1995; Netherlands (June 9-12), Ruhr Area, Germany (June 12-16). Info.: Projectbureau Industriel Erfgoed, Postbus 948, NL-3700 AX Zeist/Netherlands; Intl. Bldg. Exhibition "Emscher Park," Leithestrasse 35, D-45886, Gelsenkirchen, Germany. U.S. TICCIIH Rep.: Peter Stott, 23 Bellevue, Medford MA 02155 (617-627-3694, fax 627-3377; E-mail: [pstott@tufts.edu](mailto:pstott@tufts.edu)).

**October 12-15:** SIA Fall Tour, Nova Scotia. Info.: Henry A. Rentschler [SIA], POB 962, Paoli PA 19301

**May 16-19, 1996:** 25th SIA Annual Conference, Natchitoches, Louisiana. Info.: Henry A. Rentschler, as above.

### CONTRIBUTORS TO THIS ISSUE

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**With thanks.**

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; institutions, \$40; contributing, \$60; sustaining, \$125; corporate, \$250; student, \$20. Send check payable to SIA to Treasurer, Room 5014-MRC629, National Museum of American History, Smithsonian Institution, Washington, D.C. 20560. All business correspondence should be sent to that office.

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