

The Modern Blast Furnace RECONSIDERE

he National Park Service's Historic American Engineering Record (HAER) is undertaking a year-long contextual study of the modern blast furnace in America. This study will examine how American metallurgists and engineers integrated new technological approaches developed primarily in the Cleveland Dist. of northeastern England. As new managerial ideas filtered into American practice, and scientific principles of ironmaking overtook empirical, "rule of thumb" methods, the blast furnace

evolved into its modern form. A primary goal of HAER's study is to identify and assess the contributions of individuals, organizations, and companies

involved in this transition, as well as to highlight the furnace plants that reflect this modern ironmaking era. Beginning with the 1976

documentation of Sloss Furnace, Birmingham, Ala., HAER has studied a handful of blast furnaces, concentrating largely on the physical features of individual blast furnaces. Larger issues dealing with the nation's iron industry in the modern era, including technological development, engineering knowledge, work processes, and regional variations have not received adequate attention. An understanding of these broader concerns is needed not only as a guide to help HAER document the nation's

iron and steel industry, but also to aid the growing number of state and private organizations involved in efforts to preserve the few extant historic blast furnaces of the modern ironmaking era.

Considering its importance as an industrial artifact, the modern blast furnace has received little attention from historians of technology. Economic historians and historical geographers have produced a wealth of information on the American iron industry, but many analyses of modern furnace technology limit discussions to the use of coke as the primary furnace fuel, and the advent of hard-driving, a furnace management technique, where by the blast is blown into the furnace at high volumes and at high pressure in order to increase the speed of reduction. While these issues are important in understanding modern American practice, they have fostered a (continued on page 3)



Blast furnaces 5 (L) & 6 (R) of U.S. Steel's Edgar Thompson Works in Braddock, Pa. The furnaces were rebuilt in 1916-18.



Another view of blast furnaces 5 (R) & 6 (L) at the Edgar Thompson Works.

# Upcoming SIA Conferences and Tours

# **1997 Annual Conference**

Lake Superior Mining District, Houghton, Michigan – May 29 to June 1

lans are underway for an exceptional Annual Conference near North America's greatest lake. While the meeting will center in Houghton, at the heart of the country's first copper mining boom, arrangements are being made for an earlybird excursion to the Marquette Iron Range. On Thursday, May 29, an all-day tour will visit the Tilden Mine, Michigan's Iron Industry Museum, an active ore-loading facility, and company towns near Marquette, about 90 miles east of Houghton. Friday's tours will focus on the Portage Lake area, with visits to mining communities in the South Range, an underground tour and an intensive afternoon at the Quincy Mine National Historic Landmark, home of the world's largest steam hoist. Among the specific sites to be seen are the Portage Lake Lift Bridge, the Redridge Steel Dam, and the townsite of Painesdale. Saturday's paper sessions will be followed by a banquet at Michigan Tech. Sunday will feature a choice of half-day or full-day excursions up the Keweenaw Peninsula. Attendees will visit Calumet and several early copper mining sites, such as the Delaware Mine, where another underground tour is planned, and Fort Wilkins, the US Army post built in 1844 to promote order in the booming mining district. The Sunday tours will emphasize the early development of industry on the frontier and the importance of Lake Superior as a key transportation link, with a visit to the 1866 lighthouse at Copper Harbor.

Start making travel plans soon! Houghton County Airport (Hancock or CMX in FAA terms) is served by Northwest Airlink, with six flights per day from Detroit and Minneapolis. Alternative destinations include Marquette, Green Bay, Milwaukee, and Duluth. Meeting organizers will provide suggestions for IA visits for travelers en route from each of these locations. Contact the SIA Headquarters at (906) 487-1889; fax 487-2468; e-mail: SIA@MTU.EDU.

# 1997 Fall Tour

Alexandria, Louisiana October 2-5

he Louisiana Forestry Assn. and the Southern Heritage Museum & Research Center will host the 1997 SIA Fall Tour. The tour theme will be forestry, with a chance to experience firsthand the wood-products industry, from the harvesting of longleaf pine to the processing of lumber by both older and state-of-the art mills. Possible stops include paper, plywood, and fiberboard manufacturers. A highlight of the tour will be the Southern Forest Heritage Museum, recently established at the Crowell Sawmill site, a miraculously extant early-20th century operation, complete with skidders and steam locomotives stopped in their tracks the day the mill was shut down. Early autumn is the cotton harvest, and we plan to visit the nearby Producers Mutual cotton gin. Accommodations will be at the restored Hotel Bentley in downtown Alexandria. Info: Lauren Sickles Taves, Box 597, Natchitoches LA 71458; (318) 352-5747; fax 352-6619; e-mail: taves@cp-tel.net.

# 1997 Study Tour to Scotland

September 9-23

few spots remain for this limited 42-member tour of Scotland's fabulous industrial heritage. The "Fortnight of IA" will be guided by Mark Watson of Historic Scotland. Beginning in Edinburgh and ending in Glasgow the group will tour a wealth of IA sites including 18th-century textile mills and collieries. A highlight will be a visit to the 1909 Kinlochlever aluminum smelter and hydroelectric system, perhaps the oldest aluminum smelter in the world and scheduled to be shut down shortly after our visit. A tour brochure and announcement was mailed to all members in Sept. Info: Christopher Marston, HABS/HAER, Box 37127, Washington, D.C. 20013-7127; (202) 343-3018; e-mail: christopher\_marston@nps.gov.



Quincy Steam Hoist, piloted by Pat Malone during the 1981 SIA Fall Tour to Michigan's Upper Peninsula.

# **1998 Annual Conference**

Indianapolis, June 4-7

n 1998 the SIA Annual Conference will be in Indianapolis where we have heard there may be a *historic brickyard*! The conference organizing committee is headed by Bill McNiece and includes several SIA members and interested individuals in Indianapolis and surrounding areas. They are already hard at work selecting sites for tour visits, and organizing other aspects of the meeting. So, mark your calendars for June 4-7, 1998, and plan to race with the SIA at Indy. Info: William L. McNiece, 5250 N. Pennsylvania St., Indianapolis, IN 46220-3057; (317) 274-9992; e-mail: *wmcniece@iupui.edu.* 



The Perry K steam generation plant, built in 1893 for the Indianapolis Light & Power Co., will be one of several possible tour visits at the 1998 Indianapolis conference.

# 1997 Conference Travel Stipend Available

The SIA has limited funds to help full-time students and professionals with less than three years of full-time experience attend the annual conference at Houghton, Mich., May 29-June 1. Those interested should submit a concise letter outlining their demonstrated interest in and commitment to the field of industrial archeology or a related field, and one letter of reference.

# **Call For Papers**

#### SIA 1997 ANNUAL CONFERENCE

Michigan Technological University, Houghton, Mich. May 29 - June 1

ichigan Tech is hosting the 1997 SIA conference in Houghton, Mich., from May 29 – June 1, 1997. Situated in the heart of one of the nation's preeminent copper and iron mining regions, the conference will offer opportunities to attend paper sessions and to tour mining and industrial sites.

#### **Presentation Formats**

Proposals will include individual papers (20 min.), organized panel discussions (90 min.), reports on work in progress (10 min.), or symposia of related papers. Of particular interest will be presentations on: mining and metallurgy, industrial landscapes, historic bridges, industrial heritage preservation, and future directions for industrial archeology.

#### Deadlines

An abstract of not more than 250 words is required for all formats. Please include the title of the presentation, the names of participants, brief *curriculum vitae*, addresses, telephone/fax numbers, and audio-visual requirements. Symposia organizers should submit all of the paper abstracts as a group. Abstracts are due by Jan. 15, 1997 for review by the program committee.

#### Send Proposals To:

David Landon, SIA HQ, Dept. of Social Sciences, Mich. Tech. Univ., Houghton MI 49931; (906) 487-1889; fax 487-2468; e-mail: PEM-194.mtu.edu.

Deadline for submissions is Mar. 1, 1997. Info.: Mary E. McCahon, SIA Scholarship Comm., c/o A. G. Lichtenstein & Assoc., One Oxford Valley, Suite 818, Langhorne, PA 19047; (215) 752-2206; fax 752-1539. Notice of awards will be made by Apr. 1.

# The Modern Blast Furnace **RECONSIDERED**

#### (continued from page 1)

sense of American exceptionalism in furnace development and have neglected the influence of European models of furnace design and management.

During the 1860s, iron producers from the Cleveland Dist. developed consolidated ironmaking facilities characterized by tall, coke-fueled furnaces equipped with regenerative stoves and more powerful blowing engines. New theories of the scientific principles of iron smelting, coupled with rational systems of raw material handling and waste gas utilization established the most efficient blast furnaces then in existence. The metallurgists and engineers of the Cleveland Dist. shared their knowledge through technical publications as well as through tours and speaking engagements in the U.S. By the late 1860s and early 1870s, the work of Cleveland ironmakers was well represented in American debates of furnace practice. This "New Metallurgy," as it was often referred to, gained greater currency among iron producers following the economic panic of 1873. Concurrently, the expansion of Bessemer steelmaking prompted demands for large quantities of cheap, low-phosphorous pig iron.

HAER invites the input of SIA members interested in this study. It is HAER's intent to distribute the findings as broadly as possible through some form of publication next fall. For further information contact project historian Michael Bennett at (202) 343-9617, or e-mail Michael\_Bennett@NPS.GOV. Current project supervisor, Gray Fitzsimons, is taking a new position as historian at Lowell N.H.P. and will be replaced by Richard O'Connor (202) 343-3901.

M.B.

# Local Coalition Leads Effort to Save Historic Waterworks

he New Milford pumping station of the Hackensack Water Co. in Oradell, N.J., although no longer operating, is one of the best preserved late-19th century waterworks in the nation. The Oradell Arts & Business Coalition (OABC), a community-based, not-for-profit group, is leading the fight to preserve and adaptively reuse the waterworks as a heritage and education center that would include a museum, theater, art gallery, workshops, classrooms, restaurant, and bookstore.

The OABC's proposal calls for preserving the pump house, a red-brick Romanesque Revival building built between 1882 and 1911, and the fourstory, 1882 portion of the filtration plant. The filtration plant contains the intact labs where water purification pioneer George Spalding developed the active-carbon filtration method that became the industry standard. The group plans to save the pump house's

equipment, including the triple-expansion Allis-Chalmers pumping engines installed in 1911 and the Corliss steam engine installed in 1915.

The OABC submitted its plan and funding estimate to the Oradell Borough Council in September. If the borough cannot come up with a viable redevelopment plan, Bergen County, which currently holds title to the property, has stated it will tear down the buildings and create a passive park. A decision is expected before the end of the year. SIA President Fred Quivik has submitted a letter of support on behalf of the SIA. Further attention has been brought to the site by the N.J. Office of Hist. Preservation, which listed the pumping station on the state's "Ten Most Endangered Historical Sites." Info: Chris Armenante, OABC, 81 Prior Crt., Oradell NJ 07649; (201) 262-2287.



The Hackensack Water Co. pumping station (1882-1911) could be turned into a unique monument to the nation's waterworks industry.



The Zoarville Bridge, a Fink truss design, has verticals in compression and tension diagonals radiating from the end posts to each of the lower panel points. There is no bottom chord. The verticals are patented Phoenix columns. Years of exposure and deferred maintenance have taken their toll.

# **Can America's Last Fink** Thru Truss Bridge Be Saved?

n August a team of experts led by David Simmons of the Ohio Hist. Soc., Eric DeLony of HAER, Emory Kemp of W.Va. Univ. and Dario Gasparini of Case Western Reserve Univ., met at Zoarville, Ohio for a daylong workshop to discuss preservation options for the 1868 Zoarville Bridge. The bridge is America's only known example of a Fink through truss. Located on an old state road that was abandoned about 1940, the bridge is seriously deteriorated as a result of more than 50 years of neglect. There is concern that it may collapse under its own weight without immediate intervention.

One of the greatest threats to the bridge is flooding caused by water backing up from a Corps of Engineers' dam located downstream. Regular immersion has caused the bottoms of the verticals to corrode, thus weakening them. The group concluded that since the flooding at this location will continue, the best long-term preservation solution for the bridge is relocation. In the meantime, the Corps is being asked to remove the deck to take some load off the weakened verticals and stabilize them. A National Register nomination will be prepared, and an American Society of Civil Engineer's National Civil Engineering Landmark designation will be initiated.

The 108' long bridge was originally one span of the three-span bridge over the Tuscarawas River and Ohio & Erie Canal at nearby Dover. It was moved to its present location in 1905. The truss design was patented in 1850 by Albert Fink, who worked for the B&O RR. It was one of several innovative patented designs that stimulated the widespread use of metal bridges on American railroads. The Zoarville Bridge was designed by C. Shaler Smith (1839-1886) of Smith, Latrobe & Co. of Baltimore, Md. Smith once worked for Fink, and his company specialized in Fink trusses.

E.D. and D.A.S.

HAER/Joe Elliot photo



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COMPILED BY

Mary Habstritt, Univ. of Minnesota; Mark Hufstetler, Renewable Technologies, Inc., Bozeman, Mont.; Henry Lowood, Stanford Univ., Calif.; and Patrick Harshbarger, SIAN editor.

#### **BRIDGES AND TUNNELS**

- "Riveting Experience: In A Throwback to an Earlier Age, A Small Bridge in Winchester, MA, is Being Fastened with Rivets." In Modern Steel Construction (Sept. 1993), p. 34-37. Describes how contractor relearned shop riveting techniques using old machinery to recreate an 1890 three-hinged deck arch bridge.
- "Spanning Time." Indiana Preservationist (Nov./Dec. 1994), p. 6-13. A collection of short pieces on Indiana bridge history: "Beautiful Bridges Fading from View," by James L. Cooper, is a general history of bridge building, design and selection of materials. "How to Convince Officials to Save Bridges," by Mark Dollase, details several successful local efforts to save historic bridges with tips for convincing officials to rehabilite rather than replace them. "Museum's Spans Color Artful Landscape," by Michael Carter, describes the restoration of two early 19th-cen. bridges on the grounds of the Indianapolis Museum of Art. "Bridge to the Future," by Fred Daniel, relates plans for the Front Door Project in Columbus, Ind., which will include a unique bridge of pre-stressed post and beam box suspension construction with cantilevered road beds.
- Paul Varley. From Charing Cross to Baghdad: A History of the Whitaker Tunnel Boring Machine and the Channel Tunnel, 1880-1930. Channel Tunnel Group (Folkstone, UK), 1992. 228 p., ill. Rev.: IAR 16 (Spring 1994), p. 223.
- Tony Waters. Bridge by Bridge through London: The Thames from Tower Bridge to Teddington. Pryor Publications (75 Dargate Rd., Yorkletts, Whitstable, Kent CT5 3AE), 1989. (Avail: A Common Reader, 141 Tompkins Av., Pleasantville NY 10570; 800-832-7323.) 80 p., illus., map, bibliog. As the title implies, a guide to every bridge in London with from 1/2 to 6 pages on each.
- Thomas Winpenny. Without Fitting, Filing, or Chipping: An Illustrated History of the Phoenix Bridge Co. Canal History & Technology Press (Hugh Moore Hist. Park, Box 877, Easton PA 18044), 1996. 154 pp., illus., photos. \$23.45 ppd. plus 6% sales tax for Pa. residents. Wholesale lots avail. A well-illustrated and scholarly history of one of America's foremost bridge building companies.
- Wisconsin Dept. Of Transportation. Historic Highway Bridges in Wisconsin: Movable Bridges. 1996. Avail. from WISDOT, c/o Robert Newberry, 2517 Van Hise Ave., Madison, WI 53705-3850, (608) 266-0369. 2 vols. The report covers the

history of movable bridge construction in Wisconsin with the focus on developments in Milwaukee. The second volume is an appendix of survey forms. Prepared by Jeffrey A. Hess and Robert M. Frame III.

#### MINING AND RELATED INDUSTRIES

- Michael A. Amundson. "Home on the Range No More: The Boom and Bust of a Wyoming Uranium Mining Town, 1957-1988." In Western Hist. Qtly. 36 (Winter 1995), p. 483-505. The rise and fall of the uranium industry, and its impact on one Wyoming town.
- Stephen Bartlett. The Mines and Mining Men of Menheniot. Twelveheads Pr. (Truro), 1994. 144 p. ill. maps. Cornish lead-silver mining between 1843 and the mid-1880s. Rev.: IAR 17 (Autumn 1994), p. 97
- John Bennett & Robert W. Vernon. Mines of the Gwydyr Forest. 5 vols. Gwydr Mines (Cuddington, Wales), 1989-1993. Survey of the lead mines of Gwydyr Forest, Wales. Contents thus far: 1. Llanrwst Mine and Its Neighbors. 2. The Hafna Mines, Wanrwst and Some Early Ventures in Gwydyr Nant. 3. Parc Mine, Llanrwst and Adjacent Settlements. 4. Aberllyn Mine, Betws-y-Coed and Adjacent Settlements. 5. Coed Mawr Pool, Cyffty and Other Mines in South West Gwydyr.
- Douglas L. Crowell. History of the Coal-mining Industry in Ohio. Ohio Dept. of Natural Resources. Division of Geologic Survey (Columbus), 1995. 204 p. ill. maps.
- Walter Dinteman. Anthracite Ghosts. Univ. of Scranton Pr. (Scranton, PA), 1995. Distributed by Fordham Univ. Pr. 103 p. ill. bibliog. A phototographic work of the coal industry and abandoned coal mines in Pennsylvania's anthracite region.
- G. J. Drew & J. E. Connell. Cornish Beam Engines in South Australian Mines. Dept. of Mines and Energy, South Australia. Special Publication; 9. Adelaid, 1993. 190 p., ill. Rev.: IAR 17 (Autumn 1994), p. 96. Review calls it "possibly the clearest description ever written of the working of mine engines."
- Shane Gould, "Coke Ovens at Vobster Breach Colliery." In IAR 17 (Autumn 1994), p. 79-85. Founded in the 1860s, these coke ovens ceased working by 1889.
- Thomas Hahn & Emory Kemp. Cement Mills Along the Potomac River. West Va. Univ. Inst. for the History of Tech.

& IA (Communications Coordinator, Box 6305, 1535 Mileground, Morgantown WV 26506). Illus. \$14. This portrait of the cement industry on the Potomac looks at the development of the American canal era, production of natural cement, and includes a case study of the Shepherdstown Cement Mill.

- Michael C. Hansen. "Gold!" In *Timeline* 12 (September/October 1995), p. 44-53. An historical overview of gold mining in – of all places – Ohio. Includes descriptions of the technologies employed.
- Makin 'Hole, Pumpin' Oil: An Oral History of a West Virginia Oil Field. West Va. Univ. Inst. for the History of Tech. & IA (Communications Coordinator, Box 6305, 1535 Mileground, Morgantown WV 26506). \$15. 10 pumpers, drillers, roustabouts and a dowser who worked in the early 20th cen. oil and gas industries provided first-hand accounts for this report.
- Horace D. Marucci. The American Smelting & Refining Company in Mexico, 1900-1925. Ph.D. Thesis, Rutgers Univ., 1995. 551 p. (UMI Order No. AAC 9537612). A history of the company's early 20th century Mexican monopoly and the effects of evolving technology and international markets on Mexican politics and society.
- David Neufeld & Patrick Habiluk. Make It Pay! Gold Dredge #4, Klondike, Yukon. Pictorial Histories Publ. Co. (Missoula, Mont.), 1994. maps, illus. The birth, decline, and rebirth of the gold dredge, now part of the Parks Canada system. The dredge was a stop on the 1990 SIA Alaska-Yukon Study Tour (SIAN, Fall '90 & Winter '93).
- Eddie Nickens. "Remining Montana." In Historic Preservation 47 (Nov./Dec. 1995), p. 38-41, 91-92. Describes how Butte and Anaconda have dealt with the challenge of proceeding with reclamation of a Superfund site that allowed interpretation of their mining heritage and how the preservation efforts have renewed the towns and made them attractive to visitors once again.
- Northern West Virginia Coal Fields: Historical Context. West Va. Univ. Inst. for the History of Tech. & IA (Communications Coordinator, Box 6305, 1535 Mileground, Morgantown WV 26506). Maps. \$15. An in-depth look at five of the little-studied northern coal fields.
- Brian Rogers. "Interpretation of an 1830s Salt Works Site on the Little Swanport River, Tasmania." In Australian Journal of Historical Archaeology 9 (1991), p. 44-55.
- Clark C. Spence. Mining Engineers and the American West: The Lace-Boot Brigade, 1849-1933. Univ. of Idaho Pr. (16 Brink Hall, Moscow 83843), 1993. Index. 407 p. \$21.95. Reprint of 1970 publication, this technological and social history interweaves the professional mining engineer's education, lifestyle, work and impact on the enviroment west of the Mississippi with stories about the operation of mines and the nitty-gritty processes of locating and extracting ores.

#### **IRON AND STEEL**

 Curtis H. Barnette. Bethlehem Steel Corporation: "American Manufacturing Leadership in A Changing Global Economy." Newcomen Society of the United States (New York), 1995.
 24 p. ill. A short history of Bethlehem Steel and its future delivered as an address to the Newcomen Society.

- Walter Buschmann. "Industrial Heritage of the Iron and Steel Industry in the Lower Rhineland." In IAR 17 (Autumn 1994), p. 22-43.
- Ric Anthony Dias. Together We Build: The Rise and Fall of the Kaiser Steel Corp. in the New Deal West (Fontana, Calif.). Ph.D. Thesis, Univ. of Calif. Riverside, 1995 (UMI Order No. AAC 9541042). 491 p. Examines the Pacific Coast's first large scale mine-to-steel works.
- Thomas J. Misa. A Nation of Steel: The Making of Modern America, 1865-1925. Johns Hopkins Univ. Pr. (Baltimore), 1995. 367 p. ill. biblio.
- William Poole. "Dark Foundry." In *Historic Preservation* (May/June 1996), p. 60-67. Discusses the history and current fate of the Knight Foundry, Sutter Creek, Cal.
- Philip Riden. Gazetteer of Charcoal-fired Blast Furnaces in Great Britain in Use Since 1660. Merton Priory Pr. (7 Nant Fawr Rd., Cardiff CF2 6JQ, U.K.), 1993. Illus., maps, photos, bibliog. ú10.95. This full revision of the 1987 ed. lists over 170 furnaces.
- Geoffrey Tweedale. Steel City: Entrepreneurship, Strategy, and Technology in Sheffield, 1743-1993. Oxford University Pr., 1995. 436 p. ill. maps.

#### TEXTILES

- Mark Fletche. "Excavation and Survey at Higher Woodhill Mill, Bury [U.K.]" In IAR 17 (Autumn 1994), p. 44-63. Water-powered, cotton spinning factory, founded in 1789 by Richard Calrow.
- Colum Giles & Ian H. Goodall. Yorkshire Textile Mills: The Buildings of the Yorkshire Textile Industry, 1770-1930.
  H.M.S.O (London), 1992. 274 p., ill. biblio.
- William Knox. Hanging by Thread: The Scottish Cotton Industry, c. 1850-1914. Carnegie Pub. (Preston, Lancanshire). 204 p. ill., biblio.
- Sheila A. Mason. Nottingham Lace, 1760s-1950s. Cluny Lace Co. (Ilkeston, UK) 381 p., plates, ill. Rev.: IAR 17 (Spring 1995), p. 212.
- Eddie Nickens. "A Miller's Tale: A Company's Munificence
   and a Preservation Plan Will Keep a NC Village Intact." In *Historic Preservation* (Mar./Apr. 1996), p. 20. Describes plans to preserve the Edenton Cotton Mill village and mill building in NC.
- Brian O'Donnell. The Spindles Stop: Lowell, Massachusetts, and Manchester, New Hampshire, Respond to the Collapse of the New England Textile Industry. Ph.D. Thesis, MIT, 1995. A case history of the NE response to Southern cotton textile competition in the early to mid-1900s.

#### AGRICULTURE AND FOOD PROCESSING

- Richard J. Butterfield. "The Industrial Archaeology of the Twentieth Century: The Shredded Wheat Factory at Welwyn Garden City." In IAR 16 (Spring 1994), p. 196-215.
- Glen R. Conrad and Ray F. Lucas. White Gold: A Brief History of the Louisiana Sugar Industry, 1795-1995.
   Center for Louisiana Studies, University of Southwestern Louisiana (Lafayette), 1995. 102 p. ill. map. biblio.
- John Cooper. "A Steamy Brew." In Int'l Stationary Steam Engine Society Bulletin 15, no. 1 (Spring 1993), p. 43-53.

History of the breweries Harvey's at Lewis, King and Barnes at Horsham, and Shepherd Neame at Faversham (U.K.), with industrial archaeology of their surviving steam engines.

- Elizabeth David. Harvest of the Cold Months: The Social History of Ice and Ices. Viking Pr. (New York), 1995. 413 p., ill. (some color). An entertaining look at the history of the ice and ice cream industry. Includes some information on refrigeration and refrigerating machinery.
- Robert Fitzgerald. Rowntree and the Marketing Revolution, 1862-1969. University Pr., 1995. A history of the Rowntree chocolate candy company of Great Britain.
- Suzanne Cameron Linder. Historical Atlas of the Rice Plantations of the ACE River Basin. SC Dept. of Archives & History (1430 Senate St., Columbia SC 29201; (803) 734-8590. Traces the lives and properties of the rice planters who cultivated the lands along the Ashepoo, Cobahee, and Edisto rivers.
- Colin C. Owen. "The Greatest Brewery in the World": A History of Bass, Ratcliff & Gretton. Derbyshire Record Society, 29 (Chesterfield, UK) 272 p., ill., portraits, maps, biblio. Rev.: IAR 16 (Spring 1994), p. 221-22.
- Herman Ronnenberg. Beer and Brewing in the Inland Northwest: 1850-1950. Univ. of Idaho Pr. (Moscow ID 83844), 1993. 242 p., illus., maps, bibliog., index. \$9. Covers technicalities of brewing and distribution to the industry's advertising and marketing evolution with info. drawn from newspaper accounts, business records, advertisements and letters. Appendices list beweries by location, owner and dates of operation, beer production per year, and brand names.
- Juan Carlos Santamarina. The Cuba Company and Cuban Development, 1900-1959. Ph.D. Thesis, Rutgers Univ., 1995 (UMI Order No. AAC 9537638) 375 p. Examines the history of the Cuba Co., a trans-national sugar and railroad company and its role in the economic development of Cuba.
- Stephen F. Strausberg. From Hills and Hollers: Rise of the Poultry Industry in Arkansas. Arkansas Agricultural Experimental Station (Fayetteville, AR), 1995. 221 p. ill., biblio.
- Philip E. Vierling. The Fischer Windmill. Illinois Country Outdoor Guides (4400 N. Merrimac Av., Chicago IL 60630), 1993. 123p., illus. \$12.77. Extensively detailed documentation of 1865-67 wind-powered gristmill, later converted to steam, closed in 1912, and now a DuPage County landmark. Inc. 87 p. of drawings covering every part of the mill bldg. and its machinery and a remarkable "18-page glossary which is indexed to all his drawings, producing, in effect, a unique pictorial glossary of windmill terms." Rev.: Int'l Molinology, (Dec. 1994), p. 33.
- Ronald B. Wier. The History of the Distillers Company, 1877-1939: Diversification and Growth in Whiskey and Chemicals. Clarendon Pr., 1995. 417 p. ill. biblio.
- Paul W. Schopp and Carter Litchfield. "The Burlington Windmill: An Unusual Colonial Manufactory." In New Jersey History v. 114,1-2 (Spring/Summer 96), pp. 3-18. Described as "a small but unique development in the industrial progress of New Jersey," the windmill was erected in 1755 to grind flour, and was later converted to a combination linseed oil mill and snuff mill in the 1770s and 1780s.

#### CHEMICALS

- Charles W. Cheape. Strictly Business: Walter Carpenter at Du Pont and General Motors. Johns Hopkins Univ. Pr. (Baltimore), 1995. 309 p. ill. A biography of the a leader of the chemical and automobile industries from the 1920s to the 1970s.
- Kathy Steen. Wartime Catalyst and Postwar Reaction: The Making of the U.S. Synthetic Chemicals Industry, 1910-1930. Thesis (Ph.D.) Univ. of Del. 518 p. A history of business and technology focusing on the transfer of German technology to the U.S.

#### **MISC.** INDUSTRIES

- Grenville G. Astill. Medieval Industrial Complex and its Landscape: The Metalworking Watermills and Workshops of Bordesley Abbey. Council for British Archaeology research report; 92. Council for British Archaeology (York), 1993. 317 p. ill. microfiches; tables; maps. Rev: IAR 16 (Spring 1994): 217-18.
- John W. Amerman. The Story of Mattell, Inc. Fifty Years of Innovation. Newcomen Society of the United States (New York), 1995.
- Jeffrey A. Drobney. Lumbermen and Log Sawyers: The Transformation of Life and Labor in the North Florida Timber Industry, 1830-1930. Ph.D. Thesis, WVU, 1995 (UMI Order No. AAC 9543841). 355p.
- Robert E. Harrigan. Paper Mills and the Nation's Capital. University Pr. of America (Lanham, MD), 1995. 171 p. ill. maps. A history of paper mills in Washington, DC and suburban Maryland.
- Charles M. Jacobs. "Small Wonders, Big Business: Kenton's Cast-Iron Toys." In *Timeline* (Ohio Hist. Soc.)10 (July/Aug. 1993), p. 19-29. A brief business history of the Kenton Hardware Co. in Ohio.
- Carter Litchfield and Richard L. Porter. "The Larew Linseed Oil Mill Near Everittstown [N.J.]." In Hunterdon Historical Newsletter (Hunterdon County Historical Soc., 114 Main St., Flemington NJ 08822) 31 (Spr. 1995), p. 712-3. Details history of one of the flaxseed mills in Hunterdon Co., once an industry center, which the authors discovered in research for a future book to be titled Linseed Oil Mills of New Jersey 1732-1950. Inc. a poem, "The Old Flaxseed Mill."
- John D. Ong. The BFGoodrich Company: A Proud Heritage – An Exciting Future. Newcomen Society of the United States (New York), 1995. 23 p. ill. A look at the history and future of the B. F. Goodrich Co. along with a biography of Benjamin Franklin Goodrich.

#### **ABBREVIATIONS:**

- IAR = Industrial Archaeology Review
- RRH = Railroad History
- $T \mathscr{C} =$  Technology and Culture

# Motown Review IV: **DETROIT'S IA IN 1996**

Charles K. Hyde updates the SIA on the Motor City's Disappearing Industrial Past.

ince Detroit hosted the SIA's 9th Annual Meeting in 1980, this author has penned a half-dozen reports updating the status of the city's IA sites. For the most part, I have had to chronicle dozens of plant closings, abandonments, and demolitions. Since my last update (SIAN 90:1), I have witnessed a continuation of the same destructive trends. Detroiters unfortunately view their historic industrial buildings as disposable, much like their ten-year-old family sedans. It is ironic that while Motown residents have spent much

of 1996 celebrating the centenary of the American automobile industry, we have continued to demolish the factories that produced our storied automotive history.

General Motors closed its west side Cadillac Clark St. Assembly Plant (1921) and the Cadillac Fleetwood Body Plant (1917-1922) in 1987. Over the last three years, the reinforcedconcrete, multistory sections of both factories were demolished, and both sites are being redeveloped on a much smaller scale as single-story industrial parks. The Cadillac Body Drop, however, was salvaged and is now an operating centerpiece of the Detroit Historical Museum's "Making of the Motor City" exhibit. In 1989 the Chrysler Corp. closed its venerable Jefferson Ave. Assembly Plant (1907-1954), originally used to assemble Chalmers cars and, later, Maxwell automobiles, and in 1993 demolished the remains. In 1991 a smaller replacement plant, which assembles the Jeep Grand Cherokee, opened nearby.

Chrysler also has vacated its World Headquarters and Engineering Center in Highland Park. Formerly a Maxwell factory (ca. 1910), most of the engineering buildings there date from the 1920s, with office buildings from the 1940s through the 1970s. Chrysler transferred its engineering staff to a new \$1 billion Technology Center in suburban Auburn Hills (20 miles away) in 1990, and opened its new World HQ, also in Auburn Hills, in



The Chrysler Corp. Jefferson Ave. Plant was lost in 1993. This photo dates from ca. 1947.



, Architects & Eng. pho Albert Kahn Assoc...

The Cadillac Fleetwood Body Plan, constructed from 1917 to 1922, has been demolished to make way for an industrial park.

1995. Chrysler has already demolished a half-dozen buildings, and will sell what is left of the 140-acre site to a private developer.

Two major IA sites will disappear this year. The first, the Davison Limited Highway, opened in 1942 as Michigan's first urban expressway. The original Davison is roughly 7,000 ft. long and consists of two 3-lane unreinforced concrete pavements, with no shoulders, built below grade. The pavement and grade crossings were unaltered before new construction began last March. The \$45-million replacement highway will include two 4-lane pavements, with shoulders, and require seven new grade crossings. The second site, the Detroit Edison Co.'s massive coal-fired Connor's Creek Generating Plant (1914, 1952), which was a SIA tour stop in 1980, closed in 1989. Recently, Detroit Edison blew up the seven signature 352-ft. smokestacks, known locally as "the Seven Sisters," and will demolish the rest of the plant by the end of the year.

Other major IA sites have uncertain futures. Detroit's Mich. Central RR Station (Warren & Wetmore, 1913) closed in 1986 and has deteriorated badly since. Several preservation groups committed to the station have been short-lived and failed to raise the funds for feasibility studies. It likely will be demolished. From 1897 until 1991, Detroiters traveled by steamship to Bob-Lo (Bois Blanc) Island Amusement Park in the Detroit River some 18 miles south of the city. Two large steamers, the Columbia (1902) and the Ste. Claire (1910), each with a capacity of 2,500 passengers, made multiple daily trips during the warm months. Declining ridership forced the amusement park operators to end the boat service after the 1991 season. The island park has since closed and all the rides have been sold or scrapped. The City of Detroit owned the two boats, but recently sold them to a nonprofit foundation, which plans to sell the Ste. Claire and use the proceeds to restore the Columbia, possibly for use as a gambling excursion boat.

Detroit's venerable Tiger Stadium (1912, 1923, 1936), formerly known as Navin Field and Briggs Stadium, is now living under a death threat. The Detroit Tigers are building a new ballpark in downtown Detroit, scheduled to open for the 1999 season. In August, the courageous, but under-financed, Tiger Stadium Fan Club lost its last court appeal to block state funding for the new stadium. Financial aid from the state (\$55 million) and City of Detroit (\$40 million) will cover more than one-third of the cost of the new ballpark. The city-owned Tiger Stadium will likely be



ABOVE: The Bob-Lo Steamer Columbia, built in 1902, has been scheduled for restoration.

RIGHT: The "Seven Sisters" smokestacks of Detroit Edison Co. Connor's Creek Generating Station, opened in 1914, came tumbling down earlier this year.

BELOW: General Motors has had its offices in architect Albert Kahn's GM Building since 1922, but has recently announced plans to move to another downtown location.

demolished once the Tigers are in their new den. A Canadian football or professional soccer franchise have been mentioned as possible tenants for the Tigerless Stadium, but those are not economically viable options. One city official suggested that Detroit might copy Cleveland's plan to put rubble from its Municipal Stadium into Lake Erie to create an artificial reef to attract fish.

Finally, the General Motors Corp. announced in May that it had purchased Detroit's Renaissance Center (1973), a large riverfront office complex, and would move its offices there from the **GM Building** by late 1998. When it opened in 1922, the Albert Kahn-designed GM Building was the second-largest office building in the world. The future of "the Grand Old Lady" of W. Grand Blvd. is uncertain. The same can be said for much of Detroit's surviving IA sites.

C.H.





# Albert Kahn Assoc., Architects & Eng. photo.

# **IA Has Long-Lived Future**

A lives in Sci-Fi! It is the year 2130 in Arthur C. Clarke's Rama (1973), and the protagonist, one William Norton, has just reflected on events in his past when "he had taken a course in industrial archeology, then very popular among science and engineering graduates. They had explored abandoned coal mines and cotton mills, climbed over ruined blast furnaces and steam engines, goggled unbelievingly at primitive (and still dangerous) nuclear reactors, and driven priceless turbine-powered antiques along restored motor roads.

"Not everything they saw was genuine. Much had been lost during the centuries, for men seldom bother to preserve the commonplace articles of everyday life. But where it was necessary to make copies, they had been reconstructed with loving care. "And so, young Bill Norton had found himself bowling along at an exhilarating hundred kilometers an hour while he furiously shoveled precious coal



R.K.A

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# **1997 General Tools Award** Call for Nominations

The General Tools Award Committee invites SIA members to submit nominations for the 1997 Society for Industrial Archeology General Tools Award for Distinguished Service to Industrial Archeology. The award, presented annually at the SIA annual business meeting, recognizes individuals who have given sustained, distinguished service to the cause of industrial archeology.

Criteria for selection are as follows: (1) The recipient must have given noteworthy, beyond-the-call-of-duty service, over an extended period of time, to the cause of industrial archeology. (2) The type of service for which the recipient is recognized is unspecified, but *must be for other than academic publication*. (3) It is desirable but not required that the recipient be, or previously have been, a member of the SIA. (4) The award may be made only to living individuals. Teams, groups, agencies, firms, or any other collective entities are not eligible.

The nomination, which should not exceed three double-spaced typed pages, should address the specific accomplishments that qualify the nominee for the award. Supplementary material (the candidate's resume, for example) may be appended to the nomination. Nominations must also include the name, address, and telephone number (day and evening) of the nominator. Nominations may be made by any SIA member in good standing.

The General Tools Award was established in 1992 through the generosity of Gerald Weinstein [SIA], chairman of the board of General Tools Manufacturing, Inc. of New York City, and the Abraham and Lillian Rosenberg Foundation. The Rosenbergs founded General Hardware, the predecessor to General Tools. The award consists of a citation, a commissioned sculpture, and a \$1,000 cash award. Previous recipients are Emory Kemp (1993), Robert Vogel (1994), Edward Rutsch (1995), and Patrick Malone (1996).

Nominations, which must be received on or before April 1, 1997, should be submitted to: Carol Poh Miller, Chair, General Tools Award Committee, 17903 Rosecliff Road, Cleveland OH 44119-1347. For additional information or questions, Ms. Miller can be reached by telephone: (216) 692-0747.

# CALL FOR PAPERS

Boys and Their Toys? Masculinity, Technology, and Work. For a conference on Oct. 3, 1997, the Hagley Museum and Library, Wilmington, Del., invites scholars to submit proposals for empirical papers that raise broad issues and offer fresh conceptualizations of the relationship between masculinity, technology, and work in America since the Civil War. Welcome are historical essays as well as ethnographic studies coming from the fields of sociology, anthropology, and related social science disciplines. In considering paper proposals, work will be interpreted broadly to include white- and blue-collar labor, and entrepreneurship. Proposals for papers should be no more than 500 words and accompanied by a c.v. or resume. Deadline is Apr. 7, 1997. Info: Roger Horowitz, Center for the Hist. of Bus., Tech., and Soc., HML, Box 3630, Wilmington DE 19807; (302) 658-2400, fax 655-3188, e-mail: rh@udel.edu.

Race & Ethnicity in American Material Life. The organizers of the 1997 Winterthur Conference invite proposals for papers that will assess the influence of race and ethnicity as formative factors in American material life from the 17th through the 19th centuries. The conference will be held Oct. 3-4, 1997, at the Winterthur Museum, Gardens & Library, Winterthur, Del. Potential themes include objects as a means of cultural accommodation and assimilation and as indicators of racial and ethnic distinctiveness. Proposals are sought from museum professionals and academics from a wide range of disciplines including archeology, history, and American studies. A 250-word abstract is due Jan. 15, 1997. Info: James C. Curtis or Gary Kulik, Office of Advanced Studies, Winterthur DE 19735; (302) 888-4600.

**Ports & People.** For the annual conference of the Canadian Nautical Research Soc., at St. John, New Brunswick, May 29-31, 1997, the call for papers on the theme of "Ports and People" lends itself to a wide range of subject including engineering works,

issues of political and economic development, fishing, ships and shipbuilding, hydrographic survey, imperial conflict, and many other topics. The people can include port officials, sailors, merchants, ship owners, labourers, and any other social groups or persons associated with ports. The theme does not include limitations of time period or geography. Graduate students working in related areas are urged to apply for the CNRS's "Young Scholar's Award," which provides travel assistance. All proposals accepted for presentation are with the condition that the Society's journal, **The Northern Mariner/Le Marin du nord**, is given the first right of refusal for publication. Proposals for a paper session/info: Lcdr William Glover, Commanding Officer, HMCS Prevost, 19 Becher St., London, Ont. N6C 1A4; (519) 660-5296; fax 660-5046; or by e-mail to Ann Martin, Gov. Archives Div., Nat. Archives of Canada at *amartin@archives.ca.* ■

# IA EXHIBITS

Museums, historic sites, and other institutions are encouraged to notify SIAN of industrial history exhibits and events.

"The Standard Steel Company." The National Canal Museum is hosting an exhibit of photographs by Carol Front documenting the still-operational Standard Steel Company of Burnham, Pa. The company is a manufacturer of wheels, axles, and aerospace steel. The exhibit continues through Jan. 30. Info: NCM, 30 Centre Sq., Easton PA 18044; (610) 559-6613.

"Plowden Archives at Yale." The Beinecke Rare Book and Manuscript Library at Yale Univ. will feature an exhibit in 1997 on the work of David Plowden. The exhibit is drawn from the library's recently acquired collection covering over 40 yrs. of Plowden's career as a noted photographer and historian of technological subjects and industrial landscapes. Info: Beinecke Library, 121 Wall St., New Haven CT 06520; (203) 432-2977.

# **NOTES & QUERIES**

Invention and Technology Features SIA Study Tour of Panama. The SIA's study tour of Panama was the cover story of the Fall 1996 issue of American Heritage of Invention and Technology. The article, "Inside the Panama Canal: Experiencing the Engineering Wonder of the Century," was written by I&T editor Frederick Allen, who captured the spirit of the canal and the SIA. The magazine has generated a flurry of inquiries about the SIA. Approximately 100 letters for information have arrived at SIA headquarters, resulting in at least 50 new memberships!

Pratt Truss Bridge Offering. The Heckle Bridge, a 112 ft.long, single-span, steel Pratt through truss (ca. 1900), is being offered by the Commissioners of Somerset County, Pa., to any state or local government agency or responsible private group, who would be interested in moving and rehabilitating the bridge for preservation purposes. The bridge, which has a roadway width of 12'-10", currently carries Peterbrink Road over the Casselman River in Summit Twp., Somerset County. It is scheduled for replacement. The new owners must accept title to the bridge, agree to maintain the bridge and the features that give it historical significance, and assume all future legal and financial responsibility for the bridge. Written proposals must be submitted by 10:00 a.m., March 4 to the Somerset County Commissioners, 111 E. Union St., Suite 100, Somerset PA 15501. For info: Len Grega, Neilan Engineers, Inc., 1065 Tayman Ave., Box 837, Somerset PA 15501; (814) 445-6551.

Thomas Alva Edison Sesquicentennial Conference. In recognition of the 150th anniversary of Thomas Edison's birth, the National Park Service, the Org. of American Historians, and the N.J. Studies Academic Alliance will co-sponsor a conference "Interpreting Edison" at the Edison Nat. Hist. Site in West Orange, N.J, and the Robeson Campus Center, Rutgers Univ.-Newark from June 25-27. The 3-day conference will examine the interpretation of Edison's life and work in academic scholarship,

# **CHAPTER NEWS**

Montana's Klepetko Chapter Tours Anaconda. On Oct. 20, the Klepetko Chapter held its fall tour featuring sites around Anaconda. The group visited the Beal Mountain Gold Mine and Mill, a modern gold mine established amid 1870s placer diggings worked by Chinese miners. The chapter members also had an indepth tour of the new Jack Nicklaus Golf Course, with its emphasis on the reclamation process and the interpretation and preservation of historic smelter sites incorporated into the golf course plan. The Klepetko Chapter's fall tour was held in conjunction with the Montana History Conf. in Butte. The conference agenda included a panel on mining and smelting led by SIA president Fred Quivik, and talks by chapter members Dale Martin, Mary Murphy, and Brian Shovers. Patrick Malone, past SIA-president and this year's General Tools Award recipient, gave the luncheon talk about the historic significance of Butte-Anaconda in the context of surviving mining towns. - Klepetko Chapter Newsletter.

Roebling Chapter Holds 16th Annual Drew Symposium. On Oct. 26, the Roebling Chapter and its cosponsors (Drew Univ. Anthrop. Dept. and the N.J. Hist. Pres. Office) presented at museums and historic sites, and in the classroom. Over 25 scholars from the U.S., Can., and Europe will present new research on Edison's role as an inventor, business leader, and cultural figure. There will also be workshops designed to integrate Edison-related themes into history curriculum, and a plenary session on the interpretive programs of five Edison-related historic sites and museums. Highlights will include a virtual tour of Edison's reconstructed Menlo Park Lab at the Henry Ford Museum, a demonstration of the Library of Congress motion picture webpage, and a Victorian lunch on the grounds of Edison's estate, Glenmont. The \$30 registration fee will cover coffee breaks, lunches, and bus transport between Newark and the Edison site. Info: Leonard DeGraaf, Edison NHS, W. Orange NJ 07052; (201) 736-0550, ext. 22; e-mail: EDIS\_Curatorial@nps.gov.

US/ICOMOS Int'l Summer Intern Program. The U.S. Comm., Int'l Council on Monuments & Sites is seeking graduate students and young professionals for paid internships in Australia, France, Great Britain, Lithuania, Poland, the Slovak Republic, Turkey, Ghana, and other countries in summer 1997. Participants, who must be U.S. citizens, work for public and private nonprofit historic preservation organizations and agencies, under the direction of professionals, for a period of three months. Internships in the past have required training in architecture, architectural history, landscape architecture, materials conservation, history, archeology, interpretation, museum studies, and cultural tourism. Interns will be paid a stipend and partial or full travel grants. Applicants must have, at a minimum, a bachelor's degree and be from 22 to 35 yrs. old. Applicants should be able to demonstrate their qualifications through a combination of academic and work experience; the program is intended for those with a career commitment in the field. Info: Ellen Delage, Program Dir., US/ICOMOS, 401 F St. NW, Rm. 331, Washington DC 20001-2728; (202) 842-1862, fax 842-1861.

the annual symposium on industrial archeology at Drew University in Madison, N.J. Featured were papers on 19th-century ornamental machine design, nickel processing in N.J., Mohonk Mountain House, historic preservation in Paterson, and current projects to preserve and interpret the Morris Canal. The group viewed historic film footage of the repair of the ship *Stockholm* in a N.Y. Harbor shipyard and a scale model re-creation of the N.Y. Central RR's West Side elevated freight line as it was in 1950. – *Roebling Chapter Newsletter.* 

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 Treasurer, SIA c/o Withum, Smith, & Brown, 100 Overlook Center, Princeton, NJ 08540-7814. All other business correspondence should be sent to SIA-HQ, Dept. of Social Sciences, Mich.Tech. Univ., 1400 Townsend Dr., Houghton MI 49931-1295: (906) 487-1889; e-mail: SIA@mtu.edu.

The SIA Newsletter is included in the Avery Index to Architectural Periodicals, Avery Architectural and Fine Arts Library, Columbia University

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TO CONTACT THE EDITOR: Patrick Harshbarger, Editor, SIA Newsletter, Box 45, Toughkenamon PA 19374-0045; (610)268-3899; fax (215)752-1539; e-mail: phsianews@aol.com.

## CALENDAR

## 1997

January 15: Deadline for Paper Proposals for SIA Annual Conference in Houghton, Mich. David Landon, SIA HQ, Dept. of Social Sciences, Mich. Tech. Univ., Houghton MI 49931; (906) 487-1889; fax 487-2468; e-mail: PEM-194.mtu.edu.

**March 5-9:** Biennial Meeting of the American Society for Environmental History, Baltimore. Info: Jeffrey Stine, NMAH, MRC 629, Smithsonian Institution, Washington DC 20560; fax (202) 357-4256.

March 7: Modernism & Technology, 1900-1945. Biennial Hagley Fellows Conf., Hagley Museum & Library, Wilmington, Del. Info: Shepherd W. McKinley, Dept. of History, Univ. of Del., Newark DE 19716-2547; (302) 831-2371; fax 831-1538; e-mail: shepmck@brahms.udel.edu.

**April 4-5:** The Future of Business History: A Conference to Consider Ideas & Approaches. Hagley Museum & Library, Wilmington, Del. Info: Roger Horowitz, HML, Box 3630, Wilmington DE 19807; (302) 655-2400; fax 655-3188; e-mail: *rh@udel.edu*.

**April 17-19:** Ironmasters Meeting, Birmingham, Ala. Including a symposium and site visits to historic and operating iron and steel works. Info: Jack Bergstressor, Dept. of Anthrop., 338 Ullman, 1212 Univ. Blvd., Birmingham AL 35294; (205) 934-4690, or Edward Rutsch, 115 Route 519, Newton NJ (201) 383-6355; fax 383-9377.

May 29-30: Ports and People, Annual Conf. Of the Canadian Nautical Research Soc., St. John, New Brunswick. Info: William Glover, Com. Off., HMCS Prevost, 19 Becher St.,

London, Ont. N6C 1A4; (519) 660-5296; fax 660-5046.

May 29-June 1: SIA Annual Conference, Michigan's Lake Superior Mining District, Houghton, Mich. Info: Pat Martin, SIA HQ, Dept. of Social Sciences, Mich. Tech. Univ., 1400 Townsend Dr., Houghton MI 49931; (906) 487-1889; fax 487-2468; e-mail: SIA@mtu.edu.

June 22-29: The Int'l Committee for the Conservation of the Industrial Heritage (TICCIH), Full Conference, Greece. Info: The Greek Section of TICCIH, Inst. of Neohellenic Research /National Hellenic Research Foundation, 48, Vassileos Constantinou avenue, 11635 Athens, Greece. Tel. 30-1-721-0554; fax 30-1-724-6212.

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

SOCIETY FOR INDUSTRIAL ARCHEOLOGY June 25-27: Interpreting Edison, Thomas Alva Edison Sesquicentennial Conf., Edison NHS, West Orange, N.J. Info: Leonard DeGraaf, Edison Nat. Hist. Site, W. Orange, NJ 07052; (201) 736-0550, ext. 22; e-mail: EDIS\_Curatorial@nps.gov.

July 25-30: Science, Technology, and Industry Conference. The Int'l Union of History & Philosophy of Science, Liege, Belgium. Info: 20th Int'l Congress of History of Science, University of Liege, Centre d'Histoire des Sciences et des Techniques -Betiment D1, Avenue des Tilleuls 15, B-4000 Liege, Belgium; Tel. 32-041-66-94-79; fax 32-041-66-95-47; e-mail: chstulg@um1.ulg.ac.be.

September 9-23: SIA Study Tour of Scotland. Info.: Christopher Marston, HABS/HAER, Box 37127, Washington, D.C. 20013-7127; (202)-343-1018; e-mail: christopher\_marston@nps.gov.

Sept. 29-Oct. 3: Underground Space: Indoor Cities of Tomorrow, Montreal. 7th Int'l conference on the planning construction, management, and promotion of underground spaces from subways to tourist attractions. Archeological and industrial heritage issues are part of the program. Info: Underground Space Organizing Comm., 303 Notre Dame St. E., 5th Flr., Montreal (Quebec), Canada H2Y 3Y8; (514) 872-8343; fax 872-0024.

October 2-5: SIA Fall Tour, Alexandria, Louisiana. Info: Lauren Sickles Taves, Box 597, Natchitoches LA 71458; (318) 352-5747; fax 352-6619; e-mail: *taves@cp-tel.net*.

### 1998

June 4-7: SIA Annual Meeting, Indianapolis, Indiana. Info: William L. McNiece, 5250 N. Pennsylvania St., Indianapolis IN 46220-3057, (317) 274-9992, e-mail: wmcniece@iupui.edu.

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With thanks.

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