

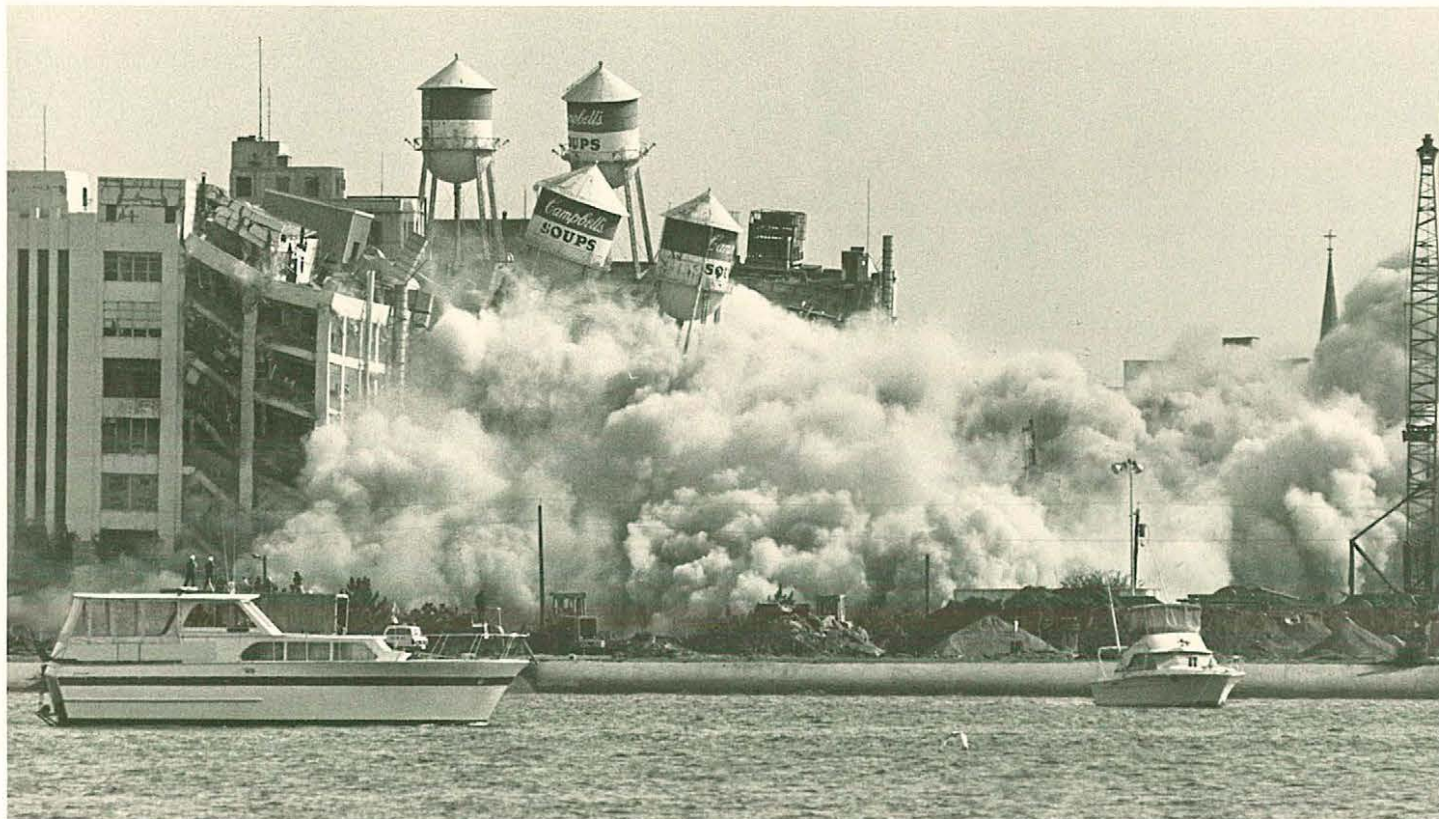
SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

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When Campbell's said "Can't," Camden said "Can!"



"The Soup" goes down in Camden, N.J. The century-old Campbell Soup factory along the Delaware River succumbed to the demolition contractor last Nov. 3. The soup-can water tanks crashed onto the rubble, but one may yet be saved. *Ed Hille photo courtesy Phila. Inquirer.*

This is a story about a campaign to save one of the famous water tanks formerly atop the Campbell Soup plant in Camden, N.J. The company painted the tanks as giant soup cans, and similar tanks have been a familiar sight on the Camden skyline since the turn of the century. In Nov. they were toppled when the soup factory was demolished for the construction of a new General Electric facility.

"The Soup," as it was known to many employees, traces its roots to 1869, when it began as an obscure partnership in the canning business. John T. Dorrance, nephew of one of the principal stockholders, was hired as a chemist in 1897. He directed the company to concentrate on producing condensed soup and eliminate other products.

The Camden complex grew from a single building in 1869 to plants and warehouses covering more than five city blocks at its peak. When it was declared obsolete and permanently closed in June, 1990, it was the city's last major employer. Demolition had already begun in 1987, when the can factory

was closed and razed after Campbell began purchasing ready-made cans. The majority of the plant was destroyed last fall. Campbell Soup now is produced largely at plants in Paris, Tex., and in several other states.

Campbell Soup still maintains a presence in Camden through the Campbell Place complex, which includes corporate offices, laboratories, and a soup-tureen museum. Campbell has made a commitment to the city and the state to maintain its headquarters in Camden, and these offices will be moving into a new building to be built on the waterfront.

The famous Campbell Soup label was created in the late 1890s by Heberton Fields Williams, who was inspired by a banner at a Cornell football game. The first water tanks were constructed of wood and the most recent were steel. At least two of the last set of tanks dated from 1923.

When the plans for the redevelopment of the Camden waterfront were finalized, they directed that the former Campbell plant would be sold to the N.J. Economic Development

"Can," cont. from page 1.

Authority for destruction. There were no plans to preserve the tanks. Campbell management deemed it logistically impossible. The Camden Preservation Trust made several futile attempts to save at least one of the tanks.

After implosion of the buildings by the contractor, one tank seemed to defy the explosives, coming to rest atop the rubble with little damage. Trust president Ed Fox declared that "When a 22-ton can of soup falls out of the sky and lands intact, it's a message from God that you have to do something to save it."

Ken Rogers, a Seattle, Wash., consultant for GE, walked past the designated tank daily, and decided to work to save it. Following a publicity blitz, he assembled a tank-preservation

coalition and obtained official corporate support from Campbell Soup Co. and others in the city. The tank to be preserved weighs 22 to 25 tons, is 30 ft. high and 21 ft. in diam. The "label" is 18 ft. high. On Jan. 29, the tank finally was removed from the rubble pile and transported to the Beckett Street Terminal of the South Jersey Port Corp., where it will remain until re-erected. It will be sand-blasted, rust-proofed, and the label will be repainted. New legs will be fabricated and the tank will be placed along the waterfront near the Beckett Street port facility.

While the newly found corporate sponsorship of the project will provide most of the funding, donations are still needed. Info.: "Yes, We Can Save the Can," 10A Crestmont Terrace, Collingswood NJ 08108.

P.W.S.

MILL NEWS

MILL FIRES. Fire continues to take its relentless toll, with the loss of two historic mills in December. On Dec. 19, the **Avondale Mill**, also known as **Crabbs' Mill**, on the Patuxent River in Laurel, Md., burned. The wood and stone mill was built in 1840 and was the sole surviving symbol of Laurel's industrial origins. Since the mid-1980s, city officials had worked on plans to turn the mill into a business and recreation center.

The 1879 **Carp Flour Mill**, oldest producing mill in Carp, Ottawa Valley, Ontario, was burned on Dec. 8. The mill's woodframe exterior was original, but the interior had been modernized and reinforced with steel. In recent years it had produced mixed feed and cleaned grain for local farmers. It had been in the Harry Lindsay family for 50 years, and the Lindsays operated it for Ottawa Valley Grain Products, Inc.

J.S. & R.J.C.

TWO MILLS IN VIRGINIA are recent additions to the state's Landmarks Register. The **Cockram Mill** is a three-story frame gristmill built c1885 by Jesse Blackard. It used waterpower to produce cornmeal, grits, buckwheat flour, rye, livestock feed, wooden boxes, lumber, and electricity. Located at the headwaters of the Dan River in Patrick County, it was unique within the local Appalachian area because it was built for mass production and used two turbines instead of an overshot wheel. It was the region's only facility to produce electricity for private sale during the 1930s.

Hanger Mill was built on the eve of the Civil War in the Churchville area of Augusta County, west of Staunton. It is an excellent and unaltered example of a mid-19th-C mill that retains most of its original milling machinery. Many local barns and mills were burned by Union forces during Civil War military campaigns in the Shenandoah Valley. Hanger Mill is one of only a handful of ante-bellum mills that have survived with its machinery intact. The mill was constructed c1860 for Jacob Hanger, a descendant of German settlers who came to the Valley before the Revolution. Its stone foundation, gable roof, heavy mortise-and-tenon construction, and four-story height, are common elements of mid-19th-C mills. It operated until 1940.

MANSFIELD MILL. The three-story, wood-frame mill in Mansfield, Ind., is again operating, grinding two tons annually

of yellow, white, and blue corn, along with wheat and rye. Its history began in 1880 when Jacob Rohm bought and razed the existing Mansfield Mill and built the present roller mill on the western bank of Raccoon Creek in Parke County. Rohm passed the milling tradition to his sons, who built a small milling empire, owning and operating mills, elevators, and storage houses in seven Parke County communities. In 1928, Jacob sold the mill to Len and Harry Reeves, who for almost 40 years produced animal feed. Hollywood's B-rated stuntman and movie cowboy, Tex Terry, was the mill's next owner. Tex dreamed of building a new western-theme vacation mecca, Frontier City, in Indiana. No tourists came, the dream died, and the mill began to deteriorate. In 1971 Francis Frazier, a Muncie preservationist, bought the mill and made extensive architectural repairs but did not restore the machinery. He sold the building to the Kirkman family, which contemplated a commercial operation but couldn't make it work. It stood vacant for three years until 1989, when Frank Hutcheson and Jack Dalton cleaned it and returned it to operation. It is located on State Road 59, about five miles south of Raccoon Lake State Park, and is open March through Dec. For info. call 317-672-4781.

Indiana Preservationist

CONNECTICUT MILLS. The newly formed nonprofit SOS Corp. hopes to save the deteriorating **Schwarzmann Mill** [NR] on Burlington Brook in Burlington, Conn. The town of Burlington purchased the mill from the Schwarzmann family in 1976, but little money has been raised to restore it. The legislature approved \$200,000 from the Dept. of Economic Development for the restoration and a state historical grant will provide \$40,000 if the town can match funds.

The **New Preston Sawmill** was constructed in 1872 in a ravine on the bank of the East Aspetuck River in Northwestern Conn. Millwright and carpenter Oscar Beeman built the mill on the stone foundation of an iron furnace. It became one of 21 water-powered mills along the seven-mile stretch of the river between Lake Waramaug and New Milford. In 1941 Robert Woodruff purchased the mill and continued operations for another 20 years, becoming the last working millwright on the East Aspetuck. Info.: New Preston Sawmill Foundation, 3 East Shore Rd., POB 2343, New Preston CT 06777.

A hydroelectric plant has been proposed for the Mansfield

Hollow Dam, formerly the power source for the **Kirby Mill**. Many in Mansfield, Conn., worry that the blasting for turbines underneath the proposed powerhouse will harm Kirby Mill and that the construction of new power lines and poles will mar the historic quality of the site. Kirby Mill was constructed in 1882 by the Natl. Thread Co., makers of spool cotton thread.

Conn. Pres. News

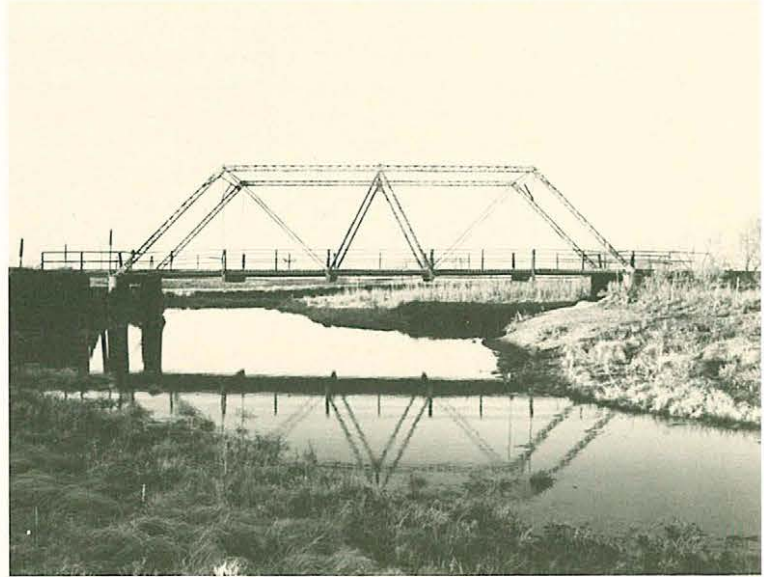
AYER MILL CLOCK RESTORED. The 1909 tower clock of Ayer Mill in Lawrence, Mass., was restored in Nov. at a cost of \$580,000. It is believed to be the largest mill clock in the world. Each of the four faces is 22 1/2 ft. across, only 6 ins. smaller than those of the Great Clock of Westminster, which houses London's Big Ben. It is inside a 40x40-ft., 267-ft.-high, red-brick tower and was built by the E. Howard Clock Co. of Boston. According to Charles Parrott [SIA], chief architect at the Lowell Historic Preservation Commn., the clock was a statement of personal and civic pride by its owner, William Madison Wood. Ayer Mill was once the world's largest yarn mill. It formed part of the American Woolen Co.'s textile empire and was named for Frederick Ayer, a Lowell patent-medicine manufacturer and the mill owner's father-in-law. American Woolen closed its New England operations, including Ayer Mill, in 1954. The mill stood vacant for six years. The main building was renovated in 1960. The tower was unused from 1954 to 1991. Restoration funds came from retired mill workers, children of the city's immigrants, and local businesses and civic groups.

Boston Globe

OHIO'S 19th-C OLENTANGY RIVER MILLING INDUSTRY is recognized in a nine-property addition to the National Register. Located in southern Delaware County, the sites include the **James Bieber Saw Mill Ruins**, four mill workers' houses, a church, and other houses and farms. Together, they document the development of the Olentangy River Valley milling industry from 1803 to 1896. The Forrest Meeker and George Bieber houses and farms were built by prosperous farmers who owned early water-powered grist mills. The Bieber Saw Mill is from the steam-power era of the late 19th C. The church and workers' houses, all built of locally quarried limestone, are the intact remnants of Stratford, a rural paper-milling village developed by the owners of **Stratford Paper Co.** between 1838 and 1896. At the height of paper production in 1866, the village included two mills, company store, school, church, and 20 workers' cottages. Info.: Sandra Davies, OHPO Central-South Office, Columbus Landmarks Found., 65 Jefferson Ave., Columbus OH 43215 (614-228-3133).

Ohio Preservation

ENDANGERED IN WIS. The Div. of Historic Preservation, State Hist. Soc. of Wis., includes two IA sites in its annual list of the ten most endangered historic properties in the state. **Portage Canal**, linking the Fox and Wisconsin rivers at Portage, is endangered by flood-control plans of the Army Corps of Engineers to build a levee across it, blocking it from the Wisconsin. The canal has been in place since 1836, but was closed to navigation in 1951. It is now under state control. The **How-Beckman Mill** in Newark, Rock County, is in poor condition. The mill ground grist from its erection in 1868 until 1954 and now is on county park property. A friends organization has been formed to save the mill, which retains some of the original water-powered equipment.



This 80-ft., King Bridge Co. truss bridge, built over the James River in Hamlin County, S.D., in 1894, is identical to one built the year before in Lac Qui Parle County, Minn. F. Quivik photo.

Rare King Bridge trusses found in S.D., Minn.

During recently completed surveys of historic bridges in Minnesota and South Dakota, Renewable Technologies, Inc., of Butte, Mont., located two examples of an unusual truss type erected by the King Bridge Co. of Cleveland. The older of the two was built over the Yellow Bank River in Lac Qui Parle County, Minn., in 1893. The other was built in 1894 over the James River in Hamlin County, S.D. Each has a single 80-ft., pin-connected, through-truss span configured as a hybrid of Pratt and Warren trusses. Of the five panels, the outer two are typical of the Pratt. The middle panel, however, is that of a Warren, consisting of two diagonal members, serving in both tension and compression, rather than the verticals in compression and diagonals in tension, as in the Pratt. That the middle panel differs from the others is evident by the fact that its diagonals are not parallel to the diagonals or the inclined end posts.

This truss configuration does not appear in any of the examples that survive among King Bridge Co. records in Ohio. It may represent an experimental effort on the part of the company's Midwestern agent to reduce the materials necessary for an 80-ft. truss. Another unusual feature of these trusses is their composite upper chord, which differs from the standard through-truss in two ways: the flanges of the two channel sections point toward each other rather than away, and the composite member is rotated 90 degrees so that the lacing bars are along the sides rather than along the bottom.

The King Bridge Co.'s early development of a large and wide-ranging sales force helped to set the firm apart from many other American bridge builders. The scale of the firm's operation undoubtedly necessitated that the home office allow field representatives a certain freedom to experiment and innovate. This hybrid truss represents the work of M.A. Adams, King's agent in Minneapolis, and may be an example of that approach.

F.Q. & D.S.



Building 159 (1919), Wash. D.C. Navy Yard Annex. *Courtesy R. Longstreth*

A question of appearances? The threat to Building 159

At first glance, the looming hulk of Building 159 in the Washington [D.C.] Navy Yard Annex might not seem the sort of legacy from the nation's industrial past that would lead to a concerted preservation initiative involving public- and private-sector organizations at the national as well as the local levels. But while the edifice has been remodeled extensively, the issues at stake are important ones concerning both the concept of integrity and the place accorded to such utilitarian buildings in the design of a new urban landscape.

Building 159 represented an ambitious project at the time it was completed in 1919. Prominently sited on the waterfront, the structure was the largest in the Navy Yard complex and perhaps the largest multi-level industrial plant of any kind then standing between Baltimore and Richmond. The five-story, reinforced-concrete structure extends 160 x 500 ft. to encompass 270,000 sq.ft. of floor space. The exposed frame's posts are set on a 32 x 20-ft. grid. Ceiling height varies from over 20 ft. on the first floor to less than 15 on the fifth. The exterior grid was treated in a uniform manner, with infill bays comprised of low brick spandrels, concrete sills, and steel-frame sash. Decorative embellishment was kept to the uppermost level, where the frame was molded into simple classicizing forms. Originally called the Machine Shop, the building was designed to house the production of torpedoes, fire-control equipment, optical parts, and specialized tools for work done on-base. Much like its original products, the plant epitomizes new technologies of the period, both in scale and design.

In 1964, the building was converted for use as federal offices. All its equipment was removed and interior partitions added. Most of the exterior infill bays on the first four stories were replaced by concrete block interspersed with small, fixed-sash windows. These alterations were considered sufficiently intrusive for a consultant to conclude in 1976 that the building was not eligible for listing on the National Register of Historic Places. More recently, others have disagreed. In an opinion prepared last Aug., the D.C. Historic Preservation Office stated: "Building 159 is one of the . . . most significant

on the . . . site, occupying a central position in a cluster of historic buildings [which] . . . provides the most coherent expression of the qualities of the potential historic district."

The controversy over Building 159 has come to a head because of plans by the General Services Administration to develop the Navy Yard Annex and contiguous property as a new Southeast Federal Center. The project, which would eventually contain some 5 million sq.ft. of office space, is commendable in many respects. GSA's initiative would introduce a high caliber of urban and architectural design to a much-neglected quarter of the city. Several existing Navy Yard Annex buildings as well as the elaborate, Beaux-Arts municipal pumping station are incorporated in the scheme. However, GSA has been adamant about not retaining Building 159, and in Jan. broke off Section 106 negotiations with the city's preservation office.

Even though Building 159 might be dismissed as no more than a denatured carcass, it is of a type that has always been unusual in the Washington area and is now extremely rare. It could be rehabilitated at a cost no greater—and probably less—than new construction with equivalent usable square footage. More important, the exterior could be restored to match the original design with undue difficulty or expense so that Building 159 may again stand as among the most conspicuous signifiers of the precinct's industrial heritage.

The fact that a large amount of new fabric must be introduced should not deter a preservation effort in cases where the only alternative is the loss of an important historic resource. With Washington's magnificent streamlined Hecht Co. warehouse (1936-37), for example, most of the brick and glass-block exterior walls will soon have to be replaced in kind, owing to an acute case of facade failure.

It remains unclear precisely why GSA is intent on demolishing Building 159. The master plan calls for somewhat more intense use of the site, achieved primarily through lower ceiling height in the new construction. Yet the underlying source of contention may well rest with appearances, GSA officials being reluctant to have a vintage industrial building as a centerpiece (and the agency's own quarters) of the monumental new project.

At a recent Advisory Council hearing, representatives from the National Trust, the Committee of 100 on the Federal City, and other groups supported the City's requests to resume talks with GSA and underscored the significance of the work in question. The comments subsequently issued by the Council take a strong stand in urging GSA to reconsider its course. For additional info., contact Richard Longstreth, Hist. Pres. Program, George Washington Univ., 2108 G St. N.W., Wash. DC 20052 (202-994-6098).

IA SUMMER FIELD SCHOOL. A six-week, three-hour graduate credit course for summer 1992 is offered through the Dept. of History, W.Va Univ. Work will include documenting 19th-C sites on Virginus Island in conjunction with Harpers Ferry Natl. Historical Park, under the guidance of Emory L. Kemp [SIA], director of the Inst. for the History of Technology & IA. The course runs July 1 through Aug. 11. Contact Billy Joe Peyton, Assoc. Dir. IHT&IA, WVU, Bicentennial House, 1535 Mileground, Morgantown WV 26505 (304-293-2513).



SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

PUBLICATIONS OF INTEREST

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MISCELLANEOUS INDUSTRIES

J. E. Burnett and A. D. Morrison-Low, **"Vulgar and Mechanick": The Scientific Instrument Trade in Ireland, 1650-1921.** Royal Dublin Society & National Museums of Scotland (Dublin & Edinburgh), 1989. ix+166p, illus., notes, index. \$15 + \$1.50 handling.

Rodney Carlisle, **Powder & Propellants: Energetic Materials of Indian Head, Maryland, 1890-1990.** U.S. Dept. of the Navy (Indian Head MD), 1990. xvi, 293p.

Paul Eisler, **My Life with the Printed Circuit.** Lehigh University Press & Associated University Presses (Bethlehem, Pa., & Cranbury, NJ), 1989. 170p, illus., notes, appendixes, bibliog., index. \$30. Travails of a small-scale inventor. Rev.: *T&C* 32, Oct. 1991, p1124-26.

Richard V. Francaviglia [SIA], **Hard Places: Reading the Landscape of America's Historic Mining Districts.** U. of Iowa Pr. (Iowa City), 1992? 248p, illus., maps, \$35. Incl. gold and silver mines in Nev. and Calif.; iron mines of Minn.; coal mines of W.V.

Susan A. Glenn, **Daughters of the Shtetl: Life and Labor in the Immigrant Generation.** Cornell U. Pr. (Ithaca, NY), 1990. 312p. \$30. Jewish immigrant women in garment making in both small contract shops and larger factories; unions; early 20th-C. Rev.: *JAH* 78, Sept. 1991, p706.

A. Heerding, **The History of N. V. Philips' Gloeilampenfabrieken, vol. 2: A Company of Many Parts.** Translated by Derek S. Jordan. Cambridge U. Pr. (NY), 1988. xiii + 371p, illus., tables, notes, appendixes, bibliog., index. \$50. Incandescent lamp industry in the Netherlands, 1891-1922. Vol. 3, covering 1922-1934, forthcoming in 1992. Rev.: *T&C* 32, Oct. 1991, p1110-11.

Richard F. Hirsh, **Technology and Transformation in the American Electric Utility Industry.** Cambridge U. Pr. (NY), 1989. xiv+274p, figures, notes, appendixes, bibliog., index. \$38. Technological stasis, 1970s-80s. Rev.: *T&C* 32, Oct. 1991, p1126-27.

Histoire Technique de la Production d'Aluminium. Presses Universitaires de Grenoble (BP 47 - 38 040 Grenoble Cedex 9 France). 352p, 220F. Aluminum.

Andrew F. Inglis, **Behind the Tube: A History of Broadcasting Technology and Business.** Focal Press (Stoneham MA), 1990. xx+527p, illus., glossary, bibliog., index. \$38. Rev.: *T&C* 32, July 1991, p621-22.

Henry J. Kaiser (1882-1967) biographies: highway and dam construction, shipbuilding, aluminum refining, steel production, automobile mfg., health care. Rev. together in *T&C* 32, July 1991, p612-14:

— Mark S. Foster, **Henry J. Kaiser: Builder in the Modern American West.** U. of Texas Pr. (Austin), 1989. xiv+358p, illus., notes, bibliog., index. \$30.

— Albert P. Heiner, **Henry J. Kaiser — American Empire Builder: An Insider's View.** Peter Lang (NY), 1989. 434p, illus., index. \$58.

Frederic Lawrence Holmes, **Eighteenth-Century Chemistry as an Investigative Enterprise.** Office for History of Science and Technology, U. of Calif. (543 Stephens Hall Berkeley CA 94720), 1989. 144p, illus., notes, appendixes, index. \$16 pap. Incl.

chemistry & industry; vitriolic acid; soda mfr. Rev.: *T&C* 32, Oct. 1991, p1106-8.

Simon Jones, **"Exotic Cargo: Chinese Export Porcelain."** In *Timeline* (Ohio Historical Society, 1982 Velma Ave., Columbus Ohio, 43211-2497) 8, Dec. 1991/Jan. 1992, p34-41 and inside back cover. China trade, 18th-19th century; with beautiful color photos, incl. examples from Christie's Nanking Cargo sale: 145,000 pieces, \$15 million total, from a Dutch ship sunk in 1752. "By this time the Chinese ... had concentrated whole hongs, or factory areas, on the production of porcelain specifically designed to meet the needs of these overseas buyers."

Kenneth Lipartito, **The Bell System and Regional Business: The Telephone in the South, 1877-1920.** Johns Hopkins U. Pr. (Baltimore MD), 1989. xvi+283p, illus., tables, notes, index. \$30. Rev.: *T&C* 32, Oct. 1991, p1114-15.

John Muendel, **"The Internal Functions of a 14th-Century Florentine Flour Factory."** In *T&C* 32, July 1991, p498-520.

Michael J. Neufeld, **The Skilled Metalworkers of Nuremberg: Craft and Glass in the Industrial Revolution.** Rutgers U. Pr. (New Brunswick, NJ), 1989. xiii+245p, tables, notes, appendixes, bibliog., index. \$42. 19th-C. Rev.: *T&C* 32, Oct. 1991, p1108-10.

Henry Petroski, **The Pencil: A History of Design and Circumstance.** Knopf (NY), 1990. xi+434p, illus., notes, bibliog., appendixes, index. \$25. Rev. by David H. Shayt in *IA* 16, No. 2, 1990, p63-4.

Clyde Rice, **Nordi's Gift.** Breitenbush Books (Portland OR), 1990. 457p, illus. \$22. (Avail.: Far Corner Books, 2349 NW Hoyt, Portland OR 97210). Autobiography, incl. wartime shipyards, lumber mills, gypso logging outfits, ocean fishing. Rev.: *Ore. Historical Q.*, Fall 1991, p315-17.

Bruce M. Stave & Michele Palmer, **Mills & Meadows: A Pictorial History of Northeast Connecticut.** Donning Co. (Virginia Beach, VA 23462), 1991. 191p, illus., bibliog., index. \$29.95 + \$4 shipping. The book cover is an A. N. Wyeth watercolor of the American Thread Mill at Willamantic; avail. as a separate 25x29-in. print for \$50 + \$5 shipping; both avail. only from Windham Textile & History Museum, Willamantic CT.

Anthony N. Stranges, **"Canada's Mines Branch and Its Synthetic Fuel Program for Energy Independence."** In *T&C* 32, July 1991, p521-54. Mostly early 20th-C to present, with background to 1778; incl. Athabasca tar sands.

George G. Suggs, Jr., **Water Mills of the Missouri Ozarks.** With paintings and illus. by Jake K. Wells. Univ. of Okla. Pr. (Norman), 1990. xvii+204p, illus. bibliog., index. \$35. Text primarily to accent the watercolors and illus.; not intended as a history of Missouri milling. Rev. note in *IA* 16, No. 2, 1990, p76.

John Tebbel and Mary Ellen Zuckerman, **The Magazine in America, 1741-1990.** Oxford Univ. Pr. (NY), 1990. 433p, bibliog., index. Incl. technology.

Richard S. Tedlow, **New and Improved: The Story of Mass Marketing in America.** Basic Books (NY), 1990. xi+481p, illus., tables, notes, appendixes, bibliog., index. \$25. Incl. cola, auto industry, refrigerators. Rev.: *T&C* 32, July 1991, p622-24.

Roger T. Tetlow and Graham J. Barbey, **Barbey: The Story of a Pioneer Columbia River Salmon Packer**. Binford & Mort (POB 42368, Portland OR 97242), 1990. xiv+254p, illus., index. Rev.: Ore. Historical Q., Fall 1991, p319-20.

Ross Thomson, **The Path to Mechanized Shoe Production in the U.S.** U. of N.C. Pr. (Chapel Hill), 1989. xiii+296p, illus., tables, notes, bibliog., index. \$40. Rev.: *T&C* 32, Oct. 1991, p1113-14.

STRUCTURE

Bruce Clouette and Matthew Roth, **Historic Highway Bridges of Rhode Island**. Rhode Island Dept. of Transportation (Providence), 1990. 72p, illus. Pap. Noted in *IA* 16, No. 2, 1990, p76.

Joel Garreau, **Edge City: Life on the New Frontier**. Doubleday (NY), 1991. 546p, glossary, notes, index. \$23. Urban sociology, geography, planning, shadow governments; by the author of *The Nine Nations of North America*. Incl. autos, "dematerializing technologies" (electronic communication, virtual reality — for example, satisfactory sex transmitted by computer will require a 3 billion baud modem); architecture, development of commercial space, malls; NY/NJ, Boston, Detroit, Atlanta (incl. new black middle class), Phoenix, Texas, S. Cal. (incl. architect Christopher Alexander), San Francisco Bay, Wash. DC; list of edge cities in U.S.; and 8-p. list of laws ("How many stories up or down an American will use the stairs: One. Frequently none.")

Sarah G. Gleason, **Kindly Lights: A History of the Lighthouses of Southern New England**. Beacon Press (Boston), 1991. 175p, illus., notes, bibliog. \$20. Conn., R.I., Mass.; incl. catalog of lighthouses.

George Hauck, **The Aqueduct of Nemausus**. MacFarland & Co. (Jefferson NC), 1988. xviii+210p, illus., notes, bibliog., index. \$25. Roman engineering, c.19 B.C., Nimes, France. Rev. by Cecil O. Smith, Jr., in *IA* 16, No. 2, 1990, p73-4.

Robert W. Hadlow, **"Oregon's Isaac Lee Patterson Memorial Bridge: The First Use of the Freyssinet Method of Concrete Arch Construction in the United States, 1932."** In *IA* 16, No. 2, 1990, p3-14. ASCE Natl. Historic Civil Engineering Landmark, Rogue River, Gold Beach, Oregon.

Philip P. Mason, **The Ambassador Bridge: A Monument to Progress**. Wayne State Univ. Pr., (Detroit), 1987. 250p, illus., notes, appendix, index. \$18 pap. Detroit, MI / Windsor, Ont., 1870-present (bridge completed 1929). Rev. by Charles L. Best, in *IA* 16, No. 2, 1990, p62.

Skyscrapers, rev. together in *T&C* 32, July 1991, p615-17:

— Lynn S. Beedle, ed., **Second Century of the Skyscraper**. Van Nostrand Reinhold (NY), 1988. xxv+1,108p, illus., tables, glossary, bibliog., indexes. \$83.

— Stephanie Williams, **Hongkong Bank: The Building of Norman Foster's Masterpiece**. Little, Brown (Boston), 1989. 302p, illus., notes, bibliog., index. \$50.

David R. Starbuck, **"The Timber Crib Dam at Sewall's Falls."** In *IA* 16, No. 2, 1990, p40-61. Longest timber crib dam in eastern U.S., constructed 1892-94, Concord, N.H.

Anthony S. Travis, **"Engineering and Politics: The Channel Tunnel in the 1880s."** In *T&C* 32, July 1991, p461-97. English Channel: political, financial, social, and technological components of "heterogeneous engineering."

Jo Broyles Yohay, **"Good & Medieval in Provence."** In *Travel & Leisure* 21, Dec. 1991, p106-115. Pay-your-own-way to work in stone masonry restoration in France and Italy. Info: La Sabraeque Restoration Projects, c/o Jacqueline C. Simon, 217 High Park Blvd., Buffalo NY 14226 (716-836-8698) or Rue de la Tour l'Oume, 30290 St-Victor-la-Coste, France.

TRANSPORTATION

John A. Adams, Jr., **Damming the Colorado: The Rise of the Lower Colo. River Authority, 1933-1939**. Texas A&M Univ. Pr. (College Station), 1990. xvii+161p, illus., notes, bibliog., index. \$27. Noted in *IA* 16, No. 2, 1990, p77-78.

Le Roy Barnett, **"Detroit, Mackinac & Marquette; the History of Michigan's Marquette - St. Ignace Railroad."** In *The Soo* 12, Oct. 1990, p20-37 (Part 1), and 13, Jan. 1991, p16-39 (Part 2). Avail.: Soo Line Historical and Technical Society.

Ann Bartholomew & Lance E. Metz, **Delaware and Lehigh Canals**. Center for Canal History and Technology (Easton PA), 1989. 158p, illus., maps, bibliog., index. \$28. Rev. by Robert W. Passfield in *IA* 16, No. 2, 1990, p69-70.

Jerold E. Brown, **Where Eagles Land: Planning and Development of U.S. Army Airfields, 1910-1941**. Greenwood Press (Westport CT), 1990. xi+220p, illus., maps, tables, notes, bibliog., index. \$40. Rev.: *T&C* 32, July 1991, p631-32.

Marie Cahill & Lynne Piade, eds. **The History of the Union Pacific Railroad: America's Great Transcontinental Railroad**. Crescent (NY),

1989. 127p, illus.

GP from BRMNA, published by British Railway Modellers of North America (5124 33d Street NW, Calgary, Alb. T2L 1V4) and rev. together in *RRH* 165, Autumn 1991, p141-42:

— Gary W. Ness & D. M. Bain, **The Canadian: Canadian Pacific's Last Transcontinental Passenger Train**, 1990. 34p. \$C10 pap.

— Garry W. Anderson, **Canadian Pacific's Trans-Canada Limited (1919-1930)**, 1990. 34 pp. \$C10 pap.

K. Coates & J. Powell, **"Whitehorse and the Building of the Alaska Highway, 1942-1946."** In *Alaska History* 4, 1989, p1-26.

Brian J. Cudahy, **Cash, Tokens, and Transfers — a History of Urban Mass Transit in North America**. Fordham U. Pr. (University Box L, Bronx, NY 10458), 1990. 266p. \$40/25 pap. Rev.: *RRH* 165, Autumn 1991, p148-49.

Virginia P. Dawson, **Engines & Innovation: Lewis Laboratory and American Propulsion Technology**. NASA (Wash. DC), 1991. 276p.

Stephen E. Donaldson & William A. Myers, **Rails through the Orange Groves, Vol. 2: A Centennial Look at the Railroads of Orange County, California**. Interurban Press (POB 6444, Glendale, CA 91225), 1990. 143p. \$35. Rev.: *RRH* 165, Autumn 1991, p134-35.

Donald Duke & Edmund Keilty, **RDC: The Budd Rail Diesel Car**. Golden West Books (POB 80250, San Marino, CA 91118), 1990. 279p. \$58. Rev.: *RRH* 165, Autumn 1991, p137-38.

John A. Eagle, **The Canadian Pacific Railway and the Development of Western Canada, 1896-1914**. McGill-Queen's U. Pr. (Montreal, Quebec; available from U. of Toronto Pr., 15201 Dufferin Street, Downsview, Ont. M3H 5T8), 1989. 325p. \$35. Rev.: *RRH* 165, Autumn 1991, p139-41.

Nicholas Faith, **The World the Railways Made**. Carroll & Graf (NY), 1991. 360p, bibliog., notes, index. \$23. Social history; world-wide.

Freshwater Press publishes materials on **Great Lakes shipping**. Items in the latest catalog include books on individual ships, fleets, shipwrecks, etc., both historical and current reference, incl.:

- Namesakes series: vols. with photos and data on individual ships, 1900-present, \$20-25 ea.
- Fleet histories series: Vol. 1, \$23/15 pap.
- 1992 Lakeboats Calendar, \$11.
- Photos of individual ships, 5x7, \$2.50 ea.
- Navigation charts (for complete list send SASE).
- Shipwreck charts (23x35-in. charts of Lakes Superior, Erie, Michigan, Huron, \$6 ea.)
- Greenwood's Guide to Great Lakes Shipping (over 1000 vessels, plus grain elevators, docks, shipyards, port profiles). \$55
- Greenwood's & Dill's Lake Boats. \$8.
- Great Lakes Red Book. \$8.
- Great Lakes Fleets stack identification guide, 21x28-in. cart, full color.
- Edgar Andrew Collard, *Passage to the Sea: The Story of Canada Steamship Lines*. \$30.
- Ralph D. Williams, *The Honorable Peter White*. 224p., illus. \$11. Early Great Lakes shipping and Michigan upper peninsula iron ore industry.

Avail: Freshwater Press, 1700 E. 13th St., Suite 3R, Cleveland OH 44114-3213, 216-241-0373 (fax: 216-781-6344)

John T. Gaertner, **North Bank Road: The Spokane, Portland, & Seattle Railway**. Wash. St. U. Pr. (Pullman), 246p, \$25. RR jointly owned by the GN and NP; Wash. and Ore.

Ken Goslett, **"From Slab Side to Cylindrical: Canadian Covered Hoppers, 1960-1985."** In *RR Model Craftsman* 60, Mar. 1992, p92-7. CN/CP grain cars, incl. dwgs., color photos.

Abbreviations used in this PoFI:

AHR	American Historical Review.
BHR	Business History Review.
CRM	[Cultural Resources Management], NPS, POB 37127, Wash. DC 20013-7127.
JAH	Journal of American History.
RRH	Railroad History

Readers are urged to send all notices of pertinent publications to John M. Wickre, Compiler, Publications of Interest, SIA Newsletter, P.O. Box 65158, St. Paul MN 55165-0158 or 61 Clapboard Ridge Road, Danbury, Connecticut 06811.

NOTES & QUERIES

"BETWEEN THE DARK & DAYLIGHT: DOMESTIC GASLIGHTING IN TORONTO, 1841-1920," is an exhibit running through Sept. 1992 at Spadina, 285 Spadina Rd., Toronto, Canada. It traces the development of domestic gaslighting in Toronto through a collection of artifacts and photographs. Info.: Linda Quick, Toronto Historical Board, at 416-392-6827.

"THE FOUNDER'S ART: BALTIMORE'S CAST-IRON ARCHITECTURE & ORNAMENTAL IRONWORK" is the first major exhibit by Baltimore Heritage, the city's non-profit preservation organization. It runs through May 1, 1992, at the Maryland Historical Society. The exhibit traces the rise and fall of cast-iron architecture in Baltimore and explains the city's contribution to this unique building type. It consists of models of buildings and gates, wooden foundry patterns, actual cast-iron columns and other architectural elements from city structures, and a selection of Victorian wrought-ironwork from Baltimore's G. Krug & Son, the nation's oldest, continuously operating ironworks. It also features numerous illustrations, including a large number of 16x20-in. color photos of extant ironfront buildings, historic prints, and the catalog of Hayward, Bartlett & Co., premier architectural ironworks in the city. At the exhibit's opening, Robert M. Vogel [SIA] spoke on "Cast Iron, the Noblest of Metals." Info.: Fred Shoken (410-625-2585).

Published in conjunction with the exhibit is *Baltimore's Cast-Iron Buildings & Architectural Ironwork* by James D. Dilts & Catharine F. Black (\$20, Tidewater Publishers, Cornell Maritime Press, POB 456, Centreville MD 21617, 1-800-638-7641).

HISTORICAL INDUSTRIAL MAPS. The **Manufacturers Mutual Fire Insurance Co. Industrial Site Maps, 1894-1954**, now are available on microfiche. A *Guide* to the collection of 2,000 maps includes an introduction by Helena Wright [SIA], Curator, Div. of Graphic Arts, Natl. Museum of American History, Smithsonian Institution, and a preface by Judith E. Endelman, Curator of Special Collections and Head, Archives & Library, Henry Ford Museum & Greenfield Village. The maps include sites in 35 states, the Dist. of Columbia, Ontario, New Brunswick, and Quebec. Zachariah Allen, Rhode Island textile manufacturer, formed the Mutual by organizing a group of his fellow textile manufacturers in 1835 to insure themselves against fire and share the losses. Industrial site maps were produced by factory inspectors in order to provide underwriters with detailed descriptions of the factories and their attendant fire risks. When the successor firm to Manufacturers Mutual determined that the maps were no longer useful for insurance purposes, a member of the firm who sensed their historic value saved them. Eventually they were presented to Henry Ford Museum and Greenfield Village. The set of 227 microfiche is \$1,475; the guide is \$50. Info.: Chadwyck-Healey Inc., 1101 King St., Alexandria VA 22314 (703-683-4890 or 800-752-0515; 800-535-0228 in Canada; fax 702-683-7589).

University Publications of America is producing 35mm positive silver-halide microfilm editions of some 280,000 **fire insurance maps from the Sanborn Map Co. archives, 1900s-1990**, with most dating post-1945. Drawn from the company archives in Pelham, N.Y. (including maps from their

former offices in Chicago & San Francisco), these particular maps never were deposited in the Library of Congress, and thus have never been available on microfilm. The collection is sold as a complete file as well as by states. The complete collection is available at a substantial discount and there is a 20% discount for ordering five or more states. States now available are Del. (\$120), DC (\$240), Md. (\$1,080), N.C. (\$840), Pa. (\$4,800), Va. (\$1,320), W.V. (\$600), N.Y. (outside N.Y.C.), and Mass. (no price on N.Y. & Mass.). The maps are copyrighted by Sanborn Mapping & Geographic Information Service; paper prints (17x22 b/w) may be purchased directly from Sanborn, 629 5th Ave., Pelham NY 10803. Microfilm info.: UPA, 4520 East-West Hwy., Bethesda MD 20814-3389 (800-692-6300; 301-657-3200 outside US; fax 301-657-3203).

THERMOPOLIS BRIDGE FOLLOW-UP. The crowd was small but the spirit was large at the **Wyoming Bridge auction**, where elements of the 1916 "Swinging Bridge" were sold to raise funds in Dec. [SIA Fall 91:4]. Members of the Hot Springs County Historical Society are still short of cash for the restoration of their pedestrian suspension bridge. A number of large bridge panels remain for sale and, to complicate matters, some costs have been increased. To purchase remaining bridge pieces, contact Dorothy Milek, POB 1311, Thermopolis WY 82443.

SUMMER IA JOBS. The **Inst. of History of Technology & Industrial Archeology**, W.Va.Univ., seeks graduate students in the history of technology interested in paid summer IA and history-of-technology work. Contact IHT&IA Assoc. Dir. Billy Joe Peyton, WVU, Bicentennial House, 1535 Mileground, Morgantown WV 26505 (304-293-2513).

BRIDGE QUERY. Seeking sources for VHS videos and computer software dealing with bridges, any type or location, is Joseph E. Konkle, 1619 Corby Blvd., South Bend IN 46617-1807.

TREDEGAR IRON WORKS, COMPANY-STORE QUERY. As part of the renovation and adaptive re-use of the Tredegar Iron Works, Richmond, Va., the company store is being investigated. The basis of a proposed exhibition will be an 1868 store inventory listing all the store's contents. There also will be an investigation of the extant structure. Still needed are interior and exterior photos, as well as any records and documents concerning company stores at other industrial sites. Information and recommendations on research and interpretation are sought by James Parkinson, The Valentine Museum, 1015 E. Clay St., Richmond VA 23219-1590 (804-649-0711, fax 643-3510).

CONN. SAWMILL QUERY. "We are about to restore a water-powered up-and-down sawmill in Conn. We could like to hear from anyone who has information, photos, descriptions, or other knowledge of existing water-powered sawmills in Conn. or elsewhere in New England." James Kricker, Rondout Woodworking Inc., 7270-1, Rt. 212, Saugerties NY 12477 (914-246-5845).

Milling into the past at the Smithsonian

Robert Gordon and Carolyn Cooper [both SIA] have been studying 19th-C New England machine tools at the Smithsonian's National Museum of American History, where Bob was a Regent's Fellow for 1991. Obsolete machines rarely escape the scrap heap, and people forget exactly how they were used. This sometimes leads to exaggerations of the machines' prowess.

Milling machines in particular have acquired a certain mythological status in the literature about the American system of manufacture, as the "de-skinner" of formerly skilled filing jobs. Recent research, however, suggests that in 19th-C metalworking, precision filing was a skill that was at first fostered by the "American system" in factories, then only gradually superseded—never entirely eliminated—by machining.

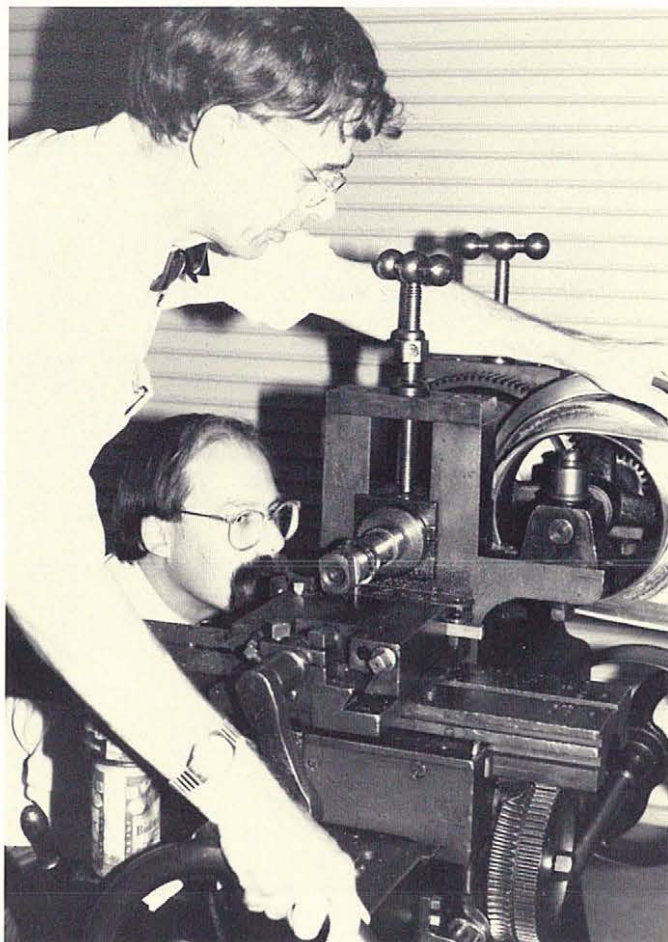
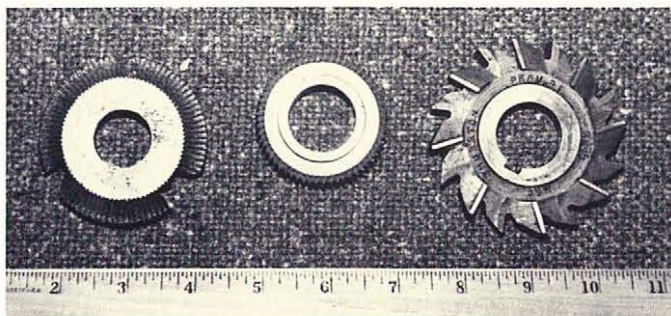
By concentrated study of a few surviving machines themselves, as distinct from their written reputation, Gordon and Cooper hope to shed light on how they were produced and used in the past. Among the machines they have studied is a "Lincoln" milling machine, made in the 1850s by George S. Lincoln at the Phoenix Iron Works in Hartford, Conn. Its spindle could be raised and lowered to accommodate low or high work. This design of miller became the work-horse of "American system" factories well into the 20th C. How well did it perform in shaping parts from wrought iron, compared to the hand filers?

At the "cutting edge" of the issue, literally as well as figuratively, is the fact that milling cutters changed considerably after the 1850s. Teeth became larger, more widely spaced, and, with Frederick Taylor's high-speed alloy steel at the turn of the century, capable of running at much higher speeds than the older fine-toothed type of cutters made of carbon steel. Some examples of the older type, however, are in the collections of the museum's Division of Engineering and Industry. With material assistance from Peter Liebhold and William Worthington [SIA] of that division, Gordon carried out an experiment in industrial archeology by running a Lincoln miller to shape a piece of wrought iron with a milling cutter that he had "back-engineered" to replicate a mid-19th-C cutter.

First he analyzed the *non*-high-speed steel of a fine-toothed old cutter in the E&I collections (at left in photo of cutters).

MILLING CUTTERS, OLD & NEW.

Cutters for milling machines used to have to have finer teeth (*left*) and were made of high-carbon steel instead of high-speed alloy steel (*right*). William Worthington of the NMAH machined a replica old-style cutter (*center*) for the experimental trial of the mid-19th-C "Phoenix Miller," currently displayed in the "Engines of Change" exhibit at the NMAH. C.C. Cooper photo.



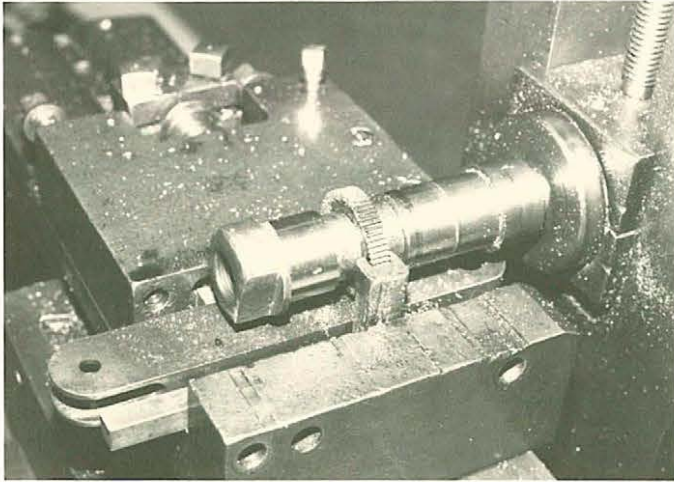
ADJUSTING THE MACHINE.

Stretching (Robert Gordon) and crouching (Peter Liebhold) are required to adjust the cutter spindle to the correct height and position relative to the workpiece to be cut. The spindle height controls are beneath the base of the machine. The beer can (*left corner*) holds cutting oil to cool and clean the cutter when brushed onto it between cuts. C.C. Cooper photo.

Then he found a near-match in a piece of new high-carbon steel, and drew up specifications for a cutter with an old-fashioned tooth form, size, and number. Worthington machined the replica cutter (at center), which was then heat-treated to the hardness of the old cutter. For contrast, note the modern, large-toothed, high-speed steel cutter at right in the photo.

The museum's "skull crew" (movers of heavy objects) removed the milling machine from its place in the "Engines of Change" exhibit, and other specialists connected it by leather belt to, not a steam engine, alas, but a one-HP electric motor, to turn the cutter at 73 RPM. After mounting the cutter on the miller's spindle, Gordon and Liebhold learned, by trial and error, to adjust the spindle to the correct height without pinching fingers too seriously. With some trepidation, they made several increasingly deep cuts on a piece of wrought iron (from an old water pipe in Danbury, Conn.), but found that the cutter, whose teeth were only about a twentieth of an inch deep, easily cut even a tenth of an inch deep in one pass, and could also give a good light finishing cut.

In addition to a flat surface cut, they used the cutter to mill a groove in another piece of wrought iron by "plunge cutting" from the side (see photo). That went smoothly, too. After adjustment of the belting to achieve 150 RPM, they repeated the first experiment at twice the speed and found that the cutter easily made a flat cut of a twentieth of an inch, but the



The replica fine-tooth cutter cuts a groove in the side of a wrought-iron workpiece when Liebhold feeds it by handwheel into the cutter. C.C. Cooper photo.

machine stalled at a repeat of the tenth-inch cut. With (anachronistic) dial indicator and micrometer, Gordon measured the wear on the cutter as well as the depth and regularity of the cuts.

Results will be reported later in more detail, but it was immediately clear from the experience of setting up and operating the old milling machine that Liebhold could adjust the depth of cut rather finely by feel rather than measurement. Levelling the spindle, however, was a cumbersome procedure, even using the four hands of two operators simultaneously. Thus, an operator would rather deepen a cut by employing a preset second machine than by resetting the depth of cut on the original machine. The massed ranks of Lincoln millers in 19th-C factory photographs therefore make sense.

C.C.C.

NOTES

CALL FOR PAPERS. The Hagley Museum & Library and the Wood Turning Center of Phila. are co-sponsoring an international **World Turning Conf., April 21-25, 1993**, that explores the social, technical, and aesthetic context of lathe work, drawing from specialists in furniture history, the history of technology, and contemporary crafts. The conf. will be held at Hagley, Wilmington, Del. This conf. was specifically conceived to expand on national efforts to celebrate 1993 as the Year of American Craft. Proposals are invited for lectures, panels, demonstrations, and workshops, on various topics, a half hour to two hours long. Interested contributors must submit a completed application by Aug. 1, 1992. Contact Albert LeCoff, Wood Turning Center, POB 25706, Phila. PA 19144 (215-844-2188, fax 844-6116). Hagley and the Center will seek funding to support travel and/or lodging expenses.

The 1993 Annual Meeting of the **Society of Architectural Historians**, April 14-18, in Charleston, S.C., will include a special session on **American Industrial Architecture**, chaired by Mark M. Brown [SIA]. In his classic 1969 study, the late John Maass observed that only three of 461 articles in the *Jnl. of the SAH* between 1958 and 1967 were on industrial buildings. More than 20 years later, the vast diversity of American industrial architecture still remains too little explored. This session proposes to assess the current state of research on industrial architecture and seeks submissions on buildings or complexes involved in the manufacture and production of goods from a wide range of industries, locations, and methodologies. Submit a one-page abstract (250 words) by July 1, 1992, to Brown, 136 East 8th Ave., Homestead PA 15120. A finished draft of a 20-min. paper must reach the session chair by Jan. 31, 1993.

Other SAH sessions of IA interest (with same proposal deadline and requirements) include:

—**Buildings as Artifacts: Modes & Methods of Structural**

Archeology, including, but not limited to, the systematic recording and study of the physical evidence of buildings, their structural behavior, the determination of date and original form, the understanding of the nature and origin of materials, and the sequence and method of construction. The session will focus on papers that examine the nature of physical evidence and how it enhances or corrects the historic and textural record of buildings. Chaired by Lothar Haselberger & Cecil L. Striker, Dept. of the Hist. of Art, Univ. of Pa., 3440 Market St., Suite 560, Phila. PA 19104-3325.

—**The Service System in Early Modern Buildings.** Mechanical & electrical engineers were the neglected supporting actors in the emergence of the early modern building. This session will explore the means by which architects and mechanical & electrical engineers c1875-1925 were able to manipulate the new building technologies of electric lighting and distribution systems, forced-air heating, ventilation & air-conditioning systems, improved water distribution, waste disposal systems, and vertical & inclined conveyance systems to created architecturally unified interiors. Chaired by Barry J. McGinn, 2820 Fir St., Vancouver BC, Canada V6T 3C3.

—**New Building Materials of the 19th C.** This session is devoted to the history, availability, cost, and meaning of the new building materials of the 19th C. Historians have tended to focus on the role of iron, steel, glass, and reinforced concrete, but the century also made critical contributions by the availability of sheet metal, industrially produced pressed brick, glass block, prismatic glass, and aluminum. Chaired by Dietrich Neumann, Dept. of Hist. of Art & Architecture, Brown Univ., Providence RI 02912-1855.

In addition to the thematic sessions, there will be four open sessions. Abstracts for these sessions should be sent to Open Session Abstracts, SAH, 1232 Pine St., Phila. PA 19107-5944.

SIA AFFAIRS

PROPOSED DUES INCREASE. The Society last raised its membership dues in 1986, six years ago. Since then, postage and publication costs have risen substantially. The expense of providing the basic benefits of membership (conferences, tours, newsletter, and journal) and the administration of the Society necessitates an increase in dues. To assure that dues reflect current costs, the Board of Directors has recommended the following dues structure: student, \$20; individual, \$35; couple, \$40; contributing, \$60; sustaining, \$125; and corporate, \$250.

To encourage the recruitment of new members, the Board also has recommended raising to \$5 the dues credit given to members for each new member they recruit. This credit is given when the new member applies for membership using the "long brochure" available from the SIA HQ. Accumulated credits will reduce the recruiting member's dues for the following year.

As stipulated in the SIA By-Laws, this dues measure will come before the membership for a vote at the Annual Business Meeting at the Annual Conference on June 6 in Buffalo.

David L. Salay
President

SIA RETIRES ROOM NUMBER 5020. With some regret, the SIA is replacing the number "5020" in the Society's HQ address with "5014—MRC 629" (for Mail Routing Code). Retiring old "5020" is not easy—in part because it's printed on all of our stuff—but also because it has been with the SIA since the BEGINNING, and, in fact, since before there was a National Museum of American History, when it was called the Museum of History & Technology. "5020" happened to be the office of Robert M. Vogel, Curator of Mechanical & Civil Engineering, at the time he and others founded the Society. Robert has retired and now his office number must go as well, at least from our address.

No one is certain how to preserve "5020"; after all, it's in a museum already. Perhaps we're merely "adaptively reusing" it, as we like to advise others to do when their building or artifact has outlived its original function. We're keeping the "50" part and scaling the "20" back to a leaner "14," while attaching a rather ugly addition, without which we might not be able to salvage the thing at all.

LETTER TO EDITOR

Appreciates "IA in Art"

I have enjoyed the occasional "IA in Art" articles in the *SIA Newsletter*. The recent article "IA in Steel Town Art," [Spring 91:7] prompts me to write. I found the artists and their work to be particularly exciting as I, too, work in watercolor, photography, and with industrial landscapes, most recently steel mills. The support for art-as-document in IA is important to me also. The author refers to the AIHP recommendations in the articles. Among the factors listed in that report which have hindered the preservation of large-scale industrial sites are "perceptions that industrial structures lack aesthetic merit." The very selection of industrial subjects by artists contradicts this. I believe art can help fight these perceptions. It's about time the sentiments and ideas conveyed

in the article's last two paragraphs appeared where an IA audience can see them. I only hope art can someday play a legitimate role in what is all too often a very "nuts 'n bolts" discipline.

Matthew Kierstead
Wellesley, Mass.

NEWS OF MEMBERS

Robert B. Gordon received the Society for the History of Technology's Abbott Payson Usher Prize for 1991 at the SHOT meeting in Nov. This is an annual award to the author of the best scholarly work published under the auspices of SHOT during the previous three years. Bob is Professor of Geophysics & Applied Mechanics at Yale Univ. His award-winning article is "Who Turned the Mechanical Ideal into Mechanical Reality?" *Technology & Culture*, 29 (Oct. 1988): 744-78, in which he "challenge[s] the notion that the precision of machines replaced the mechanical skills of artificers in the 19th century." The Usher Prize committee was chaired by **Laurence F. Gross**.

Abba G. Lichtenstein, of Tenaflly, N.J., founder and former president of A.G. Lichtenstein & Assoc., Inc., Consulting Engineers, Fair Lawn, N.J., was accorded Honorary Member status—the highest level of membership—by the American Society of Civil Engineers at their recent annual convention in Orlando, Fla. He also received the prestigious Civil Engineering History & Heritage Award. Abba is recognized internationally for his pioneering work on inspection and rehabilitation of bridges, particularly for his major contributions to the preservation and restoration of historic bridges.

Mark R. Edwards is co-recipient (with Paul Baker Touart) of the 1991 Antoinette Forrester Downing Award given by the Society of Architectural Historians. The award honors Touart's *Somerset: An Architectural History*, which was produced for the Maryland Historical Trust and Somerset County Historical Trust. Edwards is deputy director of Md.'s Dept. of Housing & Community Development (DHCD), Historical & Cultural Programs, and the award brings new recognition to the research, survey, and registration program of Edwards' division of DHCD.



CONTRIBUTORS TO THIS ISSUE

Carolyn C. Cooper, Hamden, Conn.; R. John Corby, Gloucester, Ont.; Aron Eisenpress, New York City; Betsy Fahlman, Arizona State Univ., Tempe; Michael D. Hamilton, Wash., D.C.; Edward J. Lenik, Sheffield Archaeological Consultants, Butler, N.J.; Richard Longstreth, George Washington Univ.; Dorothy Milek, Thermopolis, Wyo; Carol Poh Miller, Cleveland, Ohio; Alicia Moore, *Fortune*, N.Y.C.; Fredric Quivik, Univ. of Pennsylvania; Victor R. Rolando, Rutland, Vt.; Bart A. Roselli, Historical Society of Western Pa.; Joel Shprentz, Reston, Va.; Paul W. Schopp, Riverton, N.J.; David Simmons, Ohio Historical Society; Robert L. Spude, Denver, Colo.; and Gerald Weinstein, New York City.

With thanks.

Plans firmed up for first-class process tours in Buffalo



Above left: Buffalo's Pierce-Arrow factory, an important example of early reinforced-concrete construction and automotive plant layout. *Goldome-Roy Nagle Collection.*

Above right: Twin flight of five enlarged locks carried the Erie Canal up the Niagara Escarpment at Lockport. *Goldome-Roy Nagle Collection.*

Below: Milling cutters on Torin line at Outokumpu American Brass. *Jet Lowe photo for HAER.*



Conference planners are firming up the agenda for the SIA's 21st Annual Conference in Buffalo, June 4-8. The conference tours and many papers will reflect the industrial and engineering heritage of the city and the Niagara Frontier, dating to at least the completion of the Erie Canal in 1825.

The opening reception on Thursday, June 4, will be in the 1901 Pan American Exposition building of the Buffalo & Erie County Historical Society. There will be an audio-visual presentation on the history of the waterfront and another video documenting the unusual process of grain scooping at Buffalo's elevators. The culinary theme will be Buffalo foods: chicken wings, "beef on weck," white pizza, Aunt Rosie's Loganberry drink, and, with luck, a choice of Bully Hill's Worker's Red and U.B. Management School White wines.

Process tours on Friday, June 5, will follow recent SIA practice, with six tour buses following separate itineraries of four sites each. Current plans include the following:

- Primary metals: Bethlehem Steel, Galvanized Products Div.; American Brass; Pohlman Foundry; and Gibraltar Steel (cold roller & narrow strip).
- Automotive: Saginaw Buffalo Plant (gear & axle) and Saginaw-Tonawanda Forge.
- Metalworking: Oliver Gear; Buffalo Speciality Prods. (hwy. guardrails, &c.); and Great American Kazoo Co.
- Grain processing: Fred Koch Brewery Malting (malt house & grain elevator).
- Misc. mfg.: Pratt & Lambert Paints; Kittinger Furniture; and Buffalo Weaving & Belting.
- Hi-tech: Graphic Controls (located within the historic Larkin complex); and Calspan Flight Research Center.
- Public utilities: Col. Francis G. Ward Pumping Station.
- Electric utilities: Huntley Steam Station.

All bus routes will conclude with a visit to the private, open-air collection of historic transportation equipment and prime movers, owned by Ed Winter of Winter's RR Salvage.

Saturday will be devoted to the traditional day of paper sessions and the SIA Annual Business Meeting. The evening conference banquet will continue another fine tradition, the all-ethnic menu. This year the theme is Polish, and dinner will be served at St. Stanislaus Roman Catholic Parish Hall on the city's East Side, the center of Polonia since 1873. The Chopin Singing Society will cater the event. Consider the

sensory possibilities offered by Zrazy, Golabki, Kielbasa, and Pierogi.

Two tour options will be available on Sunday, June 7. A four-hour boat cruise around Buffalo harbor will accommodate those wishing to depart by mid-afternoon. Fourteen waterfront grain elevators will be followed by a cruise through the outer harbor to the Bethlehem Steel site in Lackawanna, then up the Black Rock Channel to the Barge Canal entrance at Tonawanda.

The alternate choice is an all-day bus excursion to Niagara Falls, USA and Lockport. The tour route will focus on Niagara River bridges, hydroelectric sites, electrochemical/electrometallurgical industries, and associated waste-disposal sites (Love Canal), plus Erie Canal IA, and will include a boat ride through the locks at Lockport.

On Monday, June 8, there will be a limited-seat tour recapitulating, in condensed form, the 1984 OSIA/SIA Niagara Peninsula Fall Tour. Special emphasis will be on the older Canadian hydro plants.

SIA members will receive an official pre-conf. packet during April. General conference info.: Tom Leary, 816 Ashland Ave., Buffalo NY 14222 (716-884-9131); paper sessions info.: Stephen Keller, Graduate Group on Industrial Heritage Policy, 565 Park Hall, SUNY Buffalo, Buffalo NY 14260 (716-636-3435).

CALENDAR

1992

Apr. 25-29: 87th Annual Meeting, American Assn. of Museums, Baltimore. Info.: AAM, POB 40, Wash. DC 20042-0040 (202-289-9113).

May 13-16: Annual Meeting, Vernacular Architecture Forum, Portsmouth, N.H. Info.: Richard Candee [SIA], 6 Scituate Rd., York ME 03909 (207-363-6635).

JUNE 4-7: SIA 21st ANNUAL CONF., BUFFALO, N.Y.
Info.: Tom Leary, 816 Ashland Ave., Buffalo NY 14222 (716-884-9131).

June 4-6: 3rd Annual Meeting, Mining History Assn., Boise, Idaho. Info.: Robert L. Spude [SIA], MHA, POB 150300, Denver CO 80215.

Aug. 6-8: Conf.: "Driving In & Moving Out: Auto Mobility in Postwar America," Los Angeles, Calif. Sponsored by Society for Commercial Archeology. Info.: H. Lee David, SCA, 4901 Murietta Ave., Sherman Oaks CA 91423 (818-788-3533).

Aug. 24-31: SIA Study Tour to Iceland [see SIAN Fall 91 for details]. Info.: Ned Heite [SIA], POB 53, Camden DE 19934 (302-697-1789).

Aug. 27-29: 4th Intl. Historic Bridges Conf., Columbus, Ohio. Info.: David Simmons [SIA], Ohio Hist. Soc., 1982 Velma Ave., Columbus OH 43211-2497 (614-297-2360).

Sept. 16-19: "Mission, Money, & Moxie: Survival of the Fittest," Annual Meeting, American Assoc. for State & Local History, Miami, Fla. Info.: Phillip C. Kwiatkowski, Western Heritage Museum, 801 S. 10th St., Omaha NE 68108-3299.

Sept. 23-26: 50th anniversary meeting, Lexington Group in Transportation History, Milwaukee, Wis. Info.: Don Hof-sommer, Dept. of History, St. Cloud St. Univ., St. Cloud MN 56301.

Oct. 15-17: Annual Meeting, Pioneer America Society,

Warren, Ohio. Info.: David Stephens, Geography Dept., Univ. of Akron, Akron OH 44325-5005 (216-747-3317).

Nov. 5-8: SIA Fall Tour, Southern Florida (based in Ft. Lauderdale). Info.: John P. Johnson, Historic Palm Beach County Preservation Board, POB 1494, Boca Raton FL 33429 (407-395-6771)

WIN BIG IN "OLDEST RR BRIDGE" CONTEST. The American Railway Engineering Assn. has launched a search for the "oldest operational steel railway bridge in North America," and is offering a \$200 prize for each of two categories. The first category is "any steel (or other form of iron) bridge over 30 ft. in span"; the second category is "truss bridges over 60 ft. in span." Here are the contest rules:

—The arch, girder, or truss must not be substantially altered or strengthened since its original construction, unless the age of the alteration or strengthening itself is old enough to be a candidate for oldest structure.

—The structure must be located where it originally was used, unless the age of the relocation itself is old enough to be a candidate for the oldest structure.

—The structure must be presently in RR service, not simply remaining in existence or used for highway instead of RR traffic, and must not be in use solely for museum or tourist-RR operations.

Entries must be submitted by June 1 to AREA, 50 F St. NW, Wash. DC 20001 (202-639-2190).

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USE FAX! Transmit to Bob Frame at TeleFax phone 612-222-4139.

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