

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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Montana IA: Awesome!



THE INCREDIBLE 585-FT. STACK IN ANACONDA, MONT., world's tallest free-standing masonry structure.

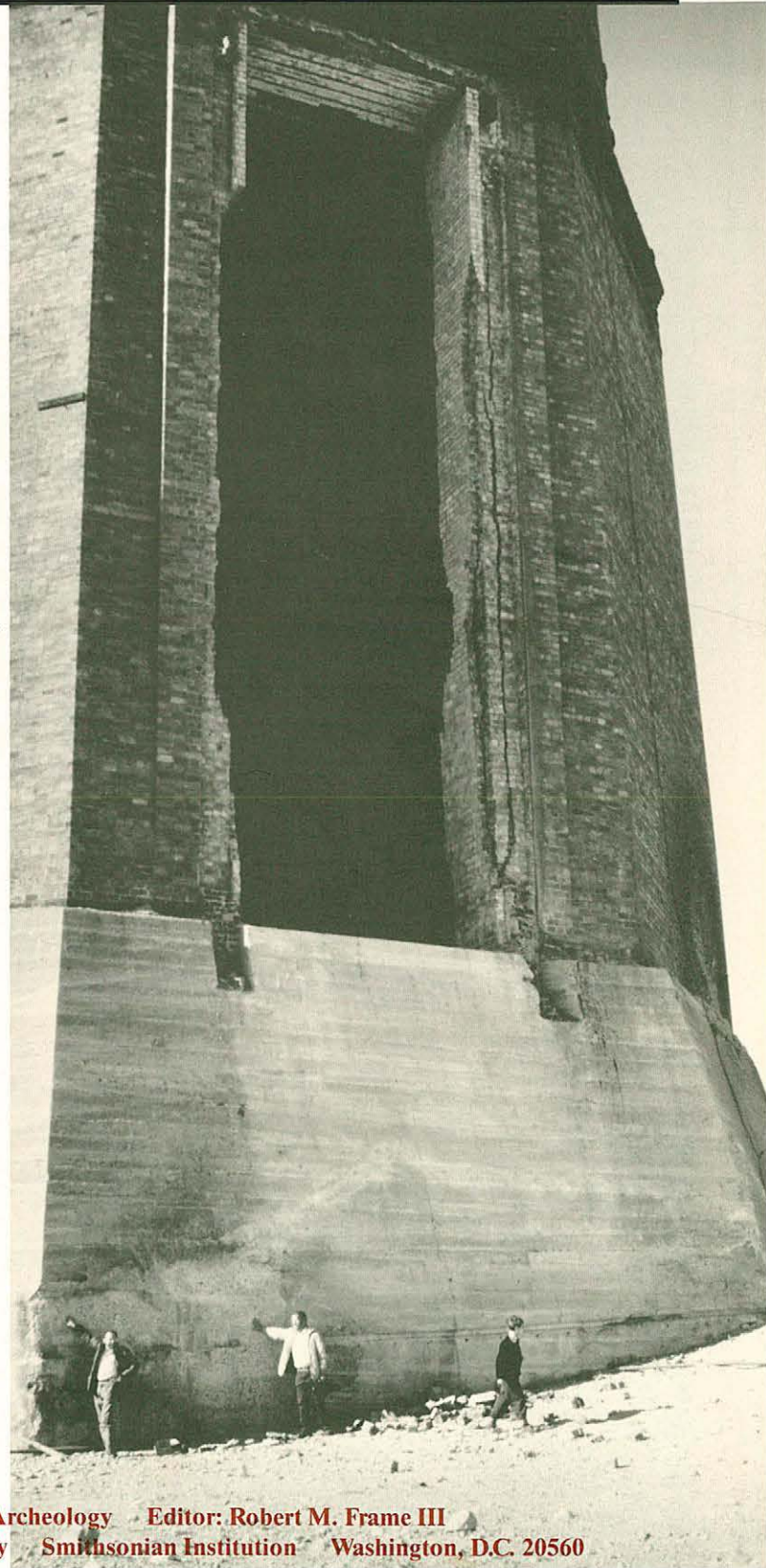
Above: This is about as close as most got to the stack. *R. Frame photo.*

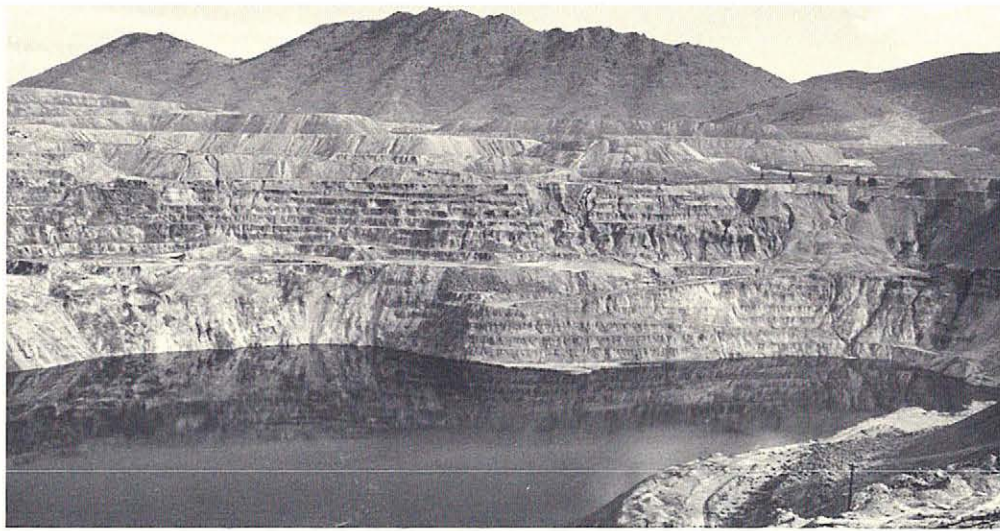
Right: An unstoppable few climbed to the stack and returned with this photo of the foundation, showing the structure's titanic scale. *Photo courtesy Gerry Weinstein.*

On Thursday, Oct. 12, we arrived at the "Richest Hill On Earth." Admittedly, some of us were a bit disoriented at the Capri Motel, our Fall Tour HQ and first introduction to historic uptown Butte. There, surrounded by a horizon of mine headframes, was a Montana motel with a (very cold) palm tree in the parking lot. It was a novel sight, to say the least. As the tour ended on Sunday, and we were winging out over fantastic western mountain terrain, the palm tree remained a mystery. But we knew a great deal more about the headframes and Butte copper mining.

Our hosts, the Frank Klepetko Chapter of SIA, provided a first-class introduction to the Butte area and the early 20th-C industrial empire built by the Anaconda Copper Mining Co. (ACM). This region was the world's greatest producer of copper, zinc, and manganese. The industrial archeological remnants of that mining empire in the cities of Butte and Anaconda were the study area of the Fall Tour. In particular, Friday was devoted to process tours of operating plants, while Saturday involved abandoned sites and structures. In 1962, Butte—the entire city—was designated a National Historic Landmark, and since 1985 efforts have been under way to develop a Butte/Anaconda Historical Park System.

On Friday morning, we followed the Butte mining chronology backwards by first visiting the Continental [open] Pit mine and the



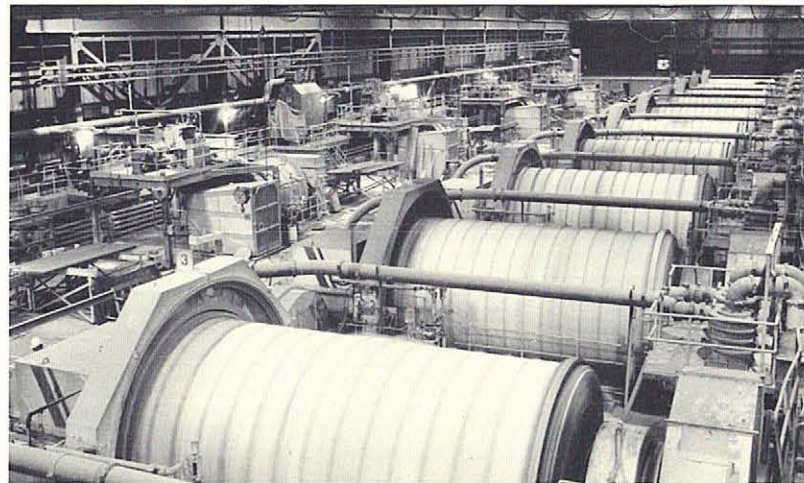


BUTTE VIEWS.

Top left: One of the giant, 150-ton-cap., "Lectra Hauls" at the Continental Pit.
Above: Berkeley Pit, opened 1955, closed 1982.

Below: Rod mills & ball mills in the Weed Concentrator.

Left: Copper and "moly" are separated from ore during "flotation," an aerated water process in the Weed Concentrator. *R. Frame photos.*



Weed Concentrator of Montana Resources, Inc. (MRI). The current operations began in 1986, when MRI purchased the Butte operations of the Anaconda Minerals Co. from the Atlantic Richfield Co. (Arco), which had acquired ACM in 1976.

Opened in 1979, the **Continental Pit** contains distinct zones of copper oxide and of sulfide with molybdenum (more easily called "moly") and traces of precious metals. It is the primary mining operation left in Butte. Socially, its non-union work force is light years away from Butte's tumultuous and sometimes violent labor past. The MRI operation is very profitable, with the average non-management employee (average age 49) making \$40,000 a year with MRI profit-sharing.

Some 50,000 tons of ore are mined daily by giant electric shovels. Huge 150-ton-cap., diesel-electric trucks haul out the ore plus 30,000 tons of overburden. The ore goes to the nearby **Weed Concentrator**, built in 1962-64 by the ACM to treat the low-grade copper sulphide ore mined at the great Berkeley Pit. The five-step process produces a concentrate containing 26% to 32% copper from a crushed ore of less than 1% copper. The central step is "flotation," where the copper and moly are separated from the crushed and milled ore in an aerated water process. The resulting copper slurry concentrate is bulk-shipped by rail to Vancouver, where it is stored for Asian smelters. The molybdenum is bagged or drummed and shipped to Europe.

Following the current MRI operations, we viewed the remnants of its origins, the great **Berkeley Pit**, opened in 1955, which quickly became the nation's largest truck-operated pit mine. Although

Left: Odd couple — Butte's Capri Motel (with frozen palm) and headframe-studded horizon. "Richest Hill on Earth" montage, removed from her Capri room, is exhibited by IA art guru, Betsy Fahlman. *R. Frame photo.*



production reached 50,000 tons daily, it was not enough to overcome shrinking world markets and foreign competition from rich ore reserves and labor at one-tenth the U.S. cost. Owner ACM closed the pit in 1982 and turned off the mine pumps, creating today's ever-deepening pit-lake, now at 800 ft.

Following a traditional Butte "porkchop" sandwich (with onion and mustard) lunch at the Butte, Anaconda & Pacific's yard at Rocker, we toured two important IA operations in Anaconda that supported and complemented the mines: the Rarus Railway shops and roundhouse, and AFFCO Foundry.

What is today known as **AFFCO Foundry** was begun in 1889 as a machinery and parts fabricator for the ACM's mines and works in Butte and Anaconda. Until 1980, when it became AFFCO, it was known as "The Foundry Dept. of the ACM Co." It is the only operating iron and steel foundry in the state and includes a remarkable collection of late-19-C structures and equipment, along with more recent additions. Particularly noteworthy are the timber-trussed and -framed blacksmith shop and the stone boiler-shop.

Today's **Rarus Rwy.** began life in the 1890s as the **Butte, Anaconda & Pacific**, built to carry ore from the Butte mines west to Anaconda for smelting and refining. It was a common carrier that also hauled mine



Taking a spin on the Rarus Railway's turntable (1893, Lassig Bridge & Iron). *Fred Quivik photo.*

supplies, such as coal, as well as timber, merchandise, freight, and passengers. It pioneered high voltage direct-current electrification, and in 1911-13 installed the first high-voltage (2,400 V) DC system in the U.S., allowing it to operate longer trains with greater speed than with steam. The BA&P electric system influenced the Milwaukee Road's decision to electrify two western sections of its Chicago-Tacoma main line in 1915-20. The demise of Butte mining in the 1970s and early 80s brought the end of the BA&P and its reorganization in 1985 as the Rarus Rwy., named for an early Butte mine.

We toured the West Anaconda shops complex, an excellent example of a late-19th-C locomotive terminal, one of only two intact survivals in the West. Of special interest was the 1894 ten-stall brick roundhouse, with its ten-stall 1907 addition, the 1897 brick machine shop, 1896 brick blacksmith/boiler shop, and 1900 wood-frame storehouse, with its full complement of parts for the current diesel operation.

The Butte part of the BA&P trackage was "toured" the next day as we took rides on the renovated **BA&P M-10**, a gasoline-engine-powered maintenance car with a hydraulic-lift roof platform for overhead catenary line repair. The car was built in the Anaconda shops in the mid-1920s and now is operated as a tourist train.

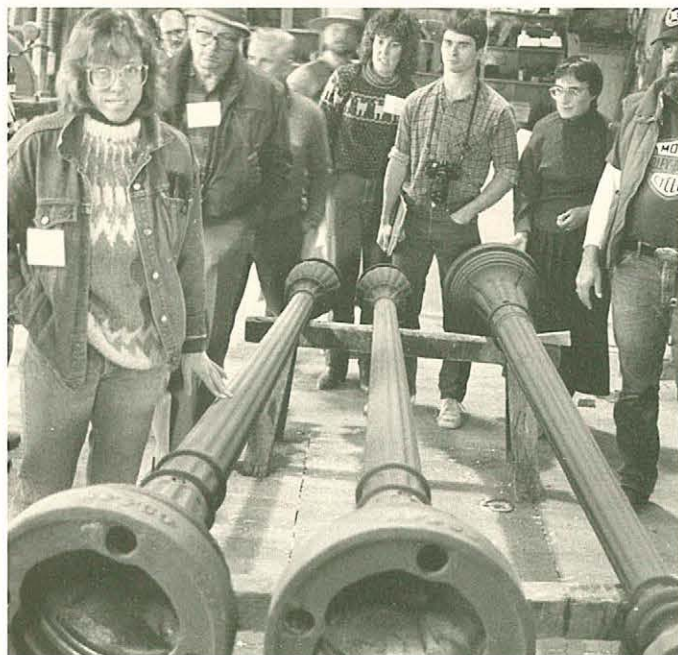
Friday's last tour was a novel one, the **Sheep Shearers' Merchandise & Commission Co.**, reflecting Montana's agricultural heritage. Owned by the Sheep Shearers' Union of North America No. 1, it is a machine-shop operation in Butte fabricating sheep-shearing machines for union members. It is the only surviving manufacturer of sheep shearers left the U.S. The union was formed in 1903 and organized the commission company in 1910. A company officer, Edwin S. Bartlett, designed the sheep-shearing machine still made here. Unlike the more familiar barber

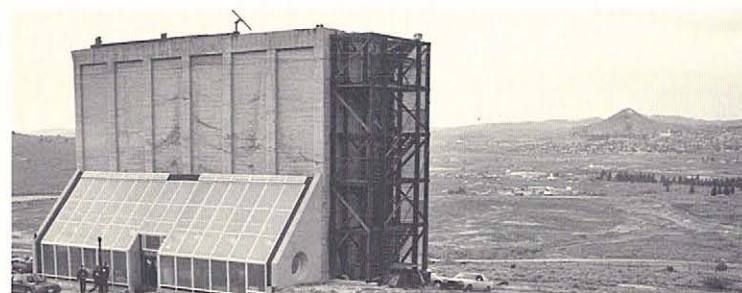
Inside this modest Butte machine shop (below), the Sheep Shearers' Union of N.A. No. 1 runs the last U.S. manufactory for the flexible-shaft sheep shearer (right). *R. Frame photos.*



AFFCO FOUNDRY.

Above: Pyramid power — the iron-breaker house (R), where scrap cast-iron is reduced to manageable pieces by a wrecking ball inside, here held down by Pofl compiler, John Wickre (L). *Left:* A pour. *Below:* Patterns for street-light standards in the pattern shop. *Fred Quivik & R. Frame photos.*





BUTTE VIEWS.

Top left: The BA&P M-10 maintenance car, built mid-'20s in Anaconda, now duded up as a tourist train.

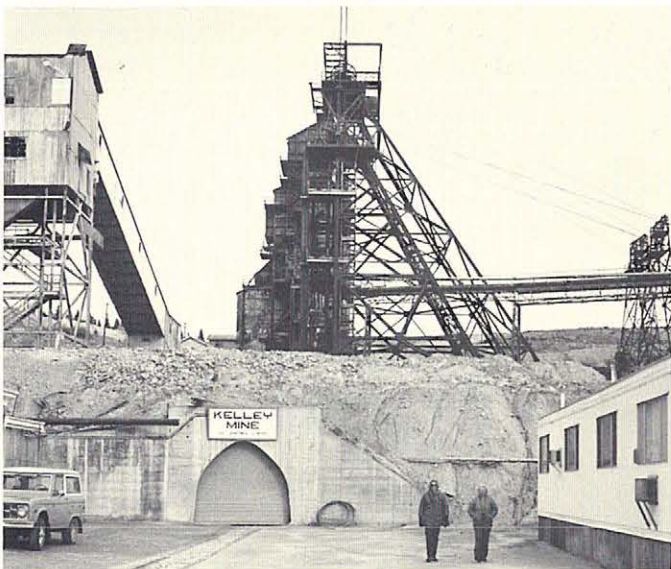
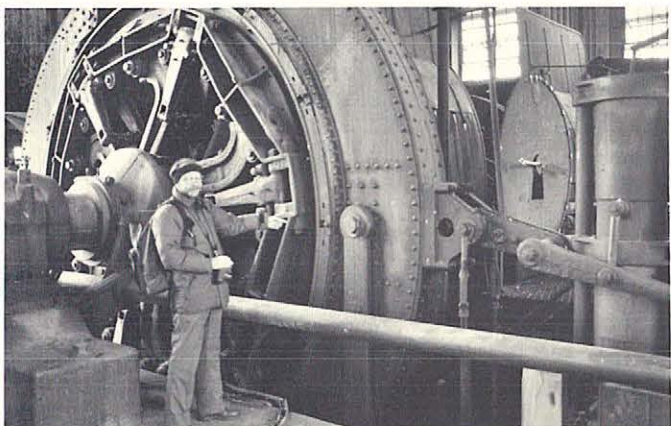
Above: "OXO Foundation," built 1913-14 as a concrete ore-bin, now a residence.

Right: Retired hoist engineer Al Hooper (L) with Klepetko Chap. & Fall Tour honcho Fred Quivik (R), in front of skips at the Steward Mine.

Left: Roebling Chap. prez Gerry Weinstein points to brake shoe on the Anselmo Mine's 1936 Nordberg DC hoist.

Left below: The Kelley Mine headframe.

R. Frame photos.



shear with its self-contained motor, a sheep-shearing machine is powered by a remote motor via a flexible shaft. Many of us bought the special star-shaped, three-blade shear-adjusting screwdrivers, which are made and sold only in the Butte shop.

Friday concluded with a special reception at the "OXO Foundation," actually the private residence of imaginative Butte architect Bob Corbett Jr. (who enjoys the term OXO because it reads the same in any direction). Corbett is in the process of creating a living space within the massive concrete ore-bin structure (not unlike a rectangular grain elevator) of the former Timber Butte Zinc Mill. Erected in 1913-14 and acquired by Corbett about 1972, the ore bins occupy a spectacular hillside site overlooking Butte.

On Saturday morning we visited several of the historic mine yards marked by the black steel headframes that we observed arrayed across Butte hill above our motel.

The **Anselmo Mine**, a 20th-C zinc mine, is the best-preserved mine yard in Butte. The 152-ft. headframe was moved here in 1936. Nearby is the 1936 main hoist house with its Nordberg DC electrical double-drum hoist capable of lifting ten-ton skips.

The **Steward Mine** was one of Butte's deepest and most productive copper-silver mines from the late 1890s until it was closed in 1973. The turn-of-the-century brick hoist-house, one of three surviving in Butte, has a steam hoisting engine converted to compressed air, a common early practice in area mine yards.

One of the more recent underground mines is the **Kelley Mine**, whose shaft was sunk in 1947, with production beginning in 1952. In the hoist house, mining engineer Bob Corbett Sr. explained block-caving mining,

Ruins of the Anaconda Old Works, early smelters and refinery built in the 1880s and demolished after 1900, now proposed as a site for an interpretive center. Note flue line extending up hill. *R. Frame photo.*





FALL TOURERS OUTSIDE, on the site of the Washoe Smelter and just below the great Anaconda stack. Nestled in the valley beyond is the town of Anaconda. *Fred Quivik photo.*

which was introduced in Butte at the Kelley Mine. Effectively employed in low-grade-ore districts in Arizona, block-caving was proposed for the increasingly lower-grade ores being encountered in Butte. The technique involves dividing the ore body into massive blocks, 120 by 120 ft., which then are undercut, causing underground collapse of the block. The broken rock is funneled by gravity down shafts, where it is loaded and hauled to the main shaft for hoisting.

Saturday lunch was a traditional miner's "pasty," a healthy lot of meat and potatoes baked in a half-moon of pastry. We were served at the **Club Moderne** in Anaconda, a marvelous Art Deco survivor.

In the afternoon we walked through the vast ruins of the **Anaconda Old Works**, both Upper and Lower works, a collection of early smelters and refinery built by ACM in the 1880s. The Old Works was demolished shortly after the turn of the century, and now is an area proposed for an interpretive center, if environmental problems can be solved. Across the valley from the Old Works was the **Washoe Reduction Works**, opened in 1902 to replace the Old Works. Washoe was demolished between 1982 and 1986, leaving only the 585-ft. Anaconda stack, the world's tallest masonry structure. To the dismay of all, an overzealous (and thus universally despised) security guard thwarted the planned bus visit to the base of the monster stack, leaving us to admire the behemoth from afar. A handful of IAers were not to be stopped, and they scrambled and clambered to the hilltop site, snapping a few quick photos before being retrieved by an "authorized" van from the Environmental Protection Agency.

Before leaving Anaconda, we viewed vintage mining films in the 1931 **Washoe Theatre** [NR], a wonderfully ornate vaudeville house whose

interior drawings have been exhibited in the Cooper-Hewitt Museum. There was a run on theater postcards when it was discovered they were made from Jet Lowe [SIA] photographs.

The city of Anaconda has a remarkably intact 1917 street-lighting system, whose light standards were cast in the AFFCO Foundry (we spotted the patterns during our visit there). Community Development Agent Barbara Andreozzi requested SIA support for preservation of the light system, and the Fall Tourers assembled in the theater voted to request SIA Board consideration of this worthy preservation effort. Letters of support should be sent either to Andreozzi at the Courthouse, or to the local paper, the *Anaconda Leader*, either addressed simply Anaconda MT 59711.

The day—and the Fall Tour—concluded back in Butte, with a hearty banquet and (very) live entertainment provided by Montana satirical song-writer and singer Greg Keeler.

For those who stayed an extra day or two, there were visits to the World Museum of Mining, the geology exhibit at the Montana College of Mineral Science & Technology, and the mansion of "copper king" entrepreneur William A. Clark.

We all appreciated the first-class efforts—tours, meals, and a thoroughly researched and written site guide—of the sponsors: the Klepetko Chapter SIA, Butte Historical Society, and the Montana College of Mineral Science & Technology. Butte, Montana, now enters the annals of Great SIA Fall Tours, following in a tradition of mining-tour excellence established by Pennsylvania (anthracite, 1979), Michigan (copper, 1981), and Colorado (minerals, 1983).

R.M.F.

FALL TOURERS INSIDE, on stage at the splendid 1931 vintage Washoe Theatre in Anaconda. *Fred Quivik photo.*



NOTES & QUERIES

RR COVERED-BRIDGE QUERY. Information is wanted on covered railroad bridges anywhere in the U.S. and Canada. Research includes wooden bridges covered with roof and siding, roof only, or no roof but with the trusses sheathed on both sides. Contact Frank Tobie, 3106 E. 15th Ave., Spokane WA 99223.

TECHNICAL PRESERVATION PUBLICATION AVAIL. Since 1973, the Technical Preservation Services Branch, Preservation Assistance Div., of the Natl. Park Service (P.O. Box 37127, Wash. DC 20013-7127) has produced 70 publications in several series of great usefulness for preservation projects. *Preservation Briefs* are short illustrated bulletins on issues such as sandblasting, use of substitute materials, and building additions, while *Preservation Tech Notes* are short essays on solutions to specific problems. *Technical Reports* are longer essays on experimental or methodological questions, such as stain removal from masonry. *Preservation Case Studies* focus on one building or block. Two recent conferences ("Windows" in 1986 and "Interiors" in 1988) have spawned *Training Handbooks & Workbooks*. A *Catalogue of Historic Preservation Publications*, avail. from Kari Koester, CRM Bulletin (address above), lists all publications and tells whether they are free or for sale by the GPO. In addition, if you have an idea for a future publication or want to help develop one, contact the Preservation Assistance Div. at the address above.

H.E.W.

EAIA GRANTS AVAILABLE. The Early American Industries Assn. awards annual grants of up to \$1,000 to individuals or institutions engaged in research for publication projects relating to the study and better understanding of early American industries in homes, shops, farms, or on the sea. The deadline for 1990 awards is Mar. 15. Info.: John S. Watson [SIA], POB 2128, Empire State Plaza Station, Albany NY 12220.

1991 SULLIVAN GRANTS. The Museum of American Textile History announces the 1991 competition for the William F. Sullivan Grants-in-Aid. Sullivan Fellows conduct research in American textile history. The application deadline is Aug. 31, 1990. Info.: Editorial & Research Committee, MATH, 800 Massachusetts Ave., N. Andover MA 01845 (508-686-0191).

UPDATED "SEC. 110" GUIDELINES. The Advisory Council on Hist. Pres. and the Nat. Park Service have jointly sponsored the publication of an updated edition of "The Section 110 Guidelines." These guidelines articulate federal agency responsibilities under Sec. 110 of the Nat. Hist. Pres. Act. This new version includes annotations to facilitate reference, along with information about pertinent guidance documents issued since the guidelines were first published in the *Federal Register*, Feb. 1988. For copies, contact the Advisory Council at 202-786-0503 or the Interagency Resources Div. of the NPS at 202-343-9559.

US/ICOMOS INTL. HIST. PRES. INTERNSHIPS. The U.S. Committee of the Intl. Council on Monuments & Sites is seeking U.S. citizen graduate students or young professionals for internships in Great Britain, the USSR, Eastern Europe (German Dem. Rep., Hungary, & Poland), and the Fed. Rep. of Germany during the summer of 1990. Participants will work for public and private nonprofit historic preservation organizations, under the direction of professionals, for three months at sites in those countries. This is an opportunity for applicants with training in architecture, architectural history, landscape architecture, archaeology, museum studies, history, planning, historic preservation, and related fields to learn about preservation techniques abroad and to develop working relationships with counterparts across the Atlantic. Costs, stipends, age restrictions, and language desirability vary with the area selected. Application deadline is Mar. 15, 1990. Info.: Ellen Delage, Program Officer, US/ICOMOS, 1600 H St. NW, Wash. DC 20006 (202-842-1866 or 1862; FAX 202-842-1861).

OHIO BRIDGE EXPERT HONORED. One of eight recipients of the Ohio Historical Society's Public Education & Awareness Award in Sept. was Miriam Wood of Columbus, who has been photographing and gathering data on covered bridges in Ohio since 1953, in an ongoing effort to encourage their preservation. In the 1970s, she was instrumental in listing more than 50 Ohio covered bridges on the National Register. She edits *Bridges & Byways*, a publication of the Southern Ohio Covered Bridge Assn., is writing a book on her decades of Ohio bridge research, and has worked with the Ohio Dept. of Trans. to update their Historic Bridge Inventory.

SOS FOR HISTORIC VESSELS. Under the Congressionally mandated "National Maritime Initiative," the Natl. Park Service (NPS), the Natl. Trust for Hist. Pres., and the maritime community have worked to revive a documentary project for historic vessels begun in the 1930s. HABS/HAER's Richard K. Anderson Jr. [SIA] has worked closely with several maritime museums, directing teams to document the historic ships *Wawona*, *Louise Travers*, *Ticonderoga*, *Alabama*, and *Balclutha*. The success of these efforts, executed 1985-88, and HABS/HAER's long experience in documentation, has led the NPS to issue a new publication designed to assist maritime preservationists, historians, naval architects, archeologists, and agencies engaged in studying, documenting, and restoring historic ships. *Guidelines for Recording Historic Ships* is available free from HABS/HAER, NPS, POB 37127, Wash. DC 20013-7127. Lavishly illustrated, with examples of completed work, it discusses the preparation of historical reports and context studies as well as documentation with large-format photography and measured drawings.

H.E.W.

HABS/HAER SUMMER JOBS. Summer 1990 employment is available on recording projects with the Historic American Buildings Survey/Historic American Engineer Record, of the Natl. Park Service. Located at various sites throughout the U.S. from May through August, the work involves ink-on-Mylar measured drawings, interpretive and process drawings, large-format photographs, and written data to document structures of historic, architectural, engineering and industrial significance. Applicants are sought in the following areas: architects & landscape architects to produce drawings; historians and engineers to conduct research and produce inventories and reports; illustrators to produce drawings; and photographers to produce large-format photographs. Applicants must submit a Personal Qualifications Statement (Standard Form 171), a letter of recommendation, and additional materials depending on the position. Application deadline is March 12, 1990. Info. & materials: Summer Program Administrator, HABS/HAER Div., NPS, POB 37127, Wash. DC 20013-7127 (202-343-9625).

HAER Chief Eric N. DeLony [SIA] has released the following list of 1990 HAER project prospects. It is anticipated that not all projects will be funded.

AN IA DARK NOTE in the story of the critically acclaimed but controversial Canadian Museum of Civilization was reported in a July 10 *Time* article on architect Douglas Cardinal, designer of the complex. According to *Time*, "A stone factory tower on the museum site apparently raised Cardinal's ire since it didn't fit his design. 'I don't want it there,' he reportedly declared, 'I wanna blow it away.'" *Time* reporters can hardly be expected to comprehend the subtleties of IA, but the "stone factory tower" is the 1892 sulphite digester tower of the E.B. Eddy Co., one of Canada's most significant industrial artifacts and believed to be the only one of its type in existence. SIA veterans will recall a 1973 visit to the structure during the infamously wet Rideau Canal Fall Tour. They will be relieved to know that Douglas the Destroyer will not be getting his way, at least not for now. The National Capital Commission, presently responsible for the tower, is to spend \$250,000 over the next year stabilizing the building, after which it will be handed over to the CMC for interpretation. In Feb. 1989 the School of Architecture at Carleton Univ. submitted proposals for future use as part of an advanced design course. One of these was quite imaginative and, while not officially solicited, may be adopted once funds become available.

R.J.C.



SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

PUBLICATIONS OF INTEREST

A SUPPLEMENT TO VOL. 18 NO. 4

WINTER 1989

Compiled by John M. Wickre

MISC. INDUSTRIES

Christopher H. Johnson, **Maurice Sugar: Law, Labor, & the Left in Detroit, 1912-1950.** Wayne St. U. Pr. (Detroit), 1988. 334p. \$40/16 pap. Communist general counsel of UAW. Rev.: *AHR* 94, Dec. 1989, p1499-1500.

Richard W. Judd, "Saving the Fisherman as Well as the Fish: Conservation and Commercial Rivalry in Maine's Lobster Industry, 1872-1933." In *BHR* 62, Winter 1988, p596-625.

Paul L. Krause, **The Road to Homestead.** Ph.D. thesis, Duke U., 1987.

Robert N. Lauriault, "From Can't to Can't: the North Florida Turpentine Camp, 1900-1950." In *Fla. Historical Q.* 67, Jan. 1989, p310-28.

Jocelyn Létourneau, "The Unthinkable History of Quebec." In *Oral Hist.* Rev. 17, Spring 1989, p89-115. Incl. 1949 asbestos strike.

Staughton Lynd, "Resisting Plant Shutdowns." In *Labor Hist.* 30, Spring 1989, p294-300. Review essay discussing Bensman & Lynch, *Rusted Dreams*; Mann, *Taking on General Motors*; and Woolfson & Foster, *Track Record* (all listed separately in this section).

Richard Mackenney, **Tradesman & Traders: The World of the Guilds in Venice & Europe, c.1250-c.1650.** Barnes & Noble (Totowa NJ), 1987. 304p, charts, maps, appendixes, bibliog. \$30. Rev.: *Labor Hist.* 30, Spring 1989, p304-6. Incl. guilds of apothecaries, ironmongers, and mercers (goldsmiths, silk & linen workers, and other trades).

Eric Mann, **Taking on General Motors: A Case Study of the UAW Campaign to Keep GM Van Nuys Open.** Inst. of Industrial Relations Pubs. (Los Angeles), 1987. 426p. \$22. Rev.: *Labor Hist.* 30, Spring 1989, p294-300. Van Nuys, Cal., auto plant closing still being fought in 1989.

Archer H. Mayor, **Southern Timberman: the Legacy of William Buchanan.** U. of Ga. Pr. (Athens), 1988. 288p, illus. \$30. Expansion of Buchanan (1849-1923) holdings from 1869 to La. & Tex. forests (incl. construction of the La. & Ark. RR), to successors' oil & gas dev. on cutover land, reforestation (incl. est. of a technologically advanced kraft paper mill in 1969), & 1970s sale to Intl. Paper. Rev.: *JAH* 76, Dec. 1989, p948-9.

Thomas K. McCraw & Forest Reinhardt, "Losing to Win: U.S. Steel's Pricing, Investment Decisions, and Market Share, 1901-1938." In *JEH* 49, Sept. 1989, p593-619.

Curtis Miner & Paul Roberts, "Engineering an Industrial Diaspora: Homestead, 1941." In *Pittsburgh History* 72, Winter 1989, p4-25.

David M. Moyers, "Trouble in a Company Town: the Crossett Strike of 1940." In *Kansas Historical Q.* 48, Spring 1989, p34-56.

Milton Mueller, "The Switchboard Problem: Scale, Signaling, and Organization in Manual Telephone Switching, 1877-1897." In *T&C* 30, July 1989, p534-60.

Peter Neushel, "Seaweed for War: California's World War I Kelp Industry." In *T&C* 30, July 1989, p561-83. Potash for munitions, and 50+ other products; though ignoring alginates, the basis for a later kelp industry.

David Nicholas, **The Metamorphosis of a Medieval City: Ghent in the Age of the Artevelde, 1302-1390.** U. of Neb. Pr. (Lincoln), 1987. 379p. \$35. Incl. decline of woolen industry. Rev.: *AHR* 94, Dec. 1989, p1359-60.

Allen Pauls, "The Milling Industry in Inman, Kansas." In *Heritage of the Great Plains* 21, Summer 1988, p32-37.

Douglas Reynolds, "Engines of Struggle: Technology, Skill, and Unionization at General Motors, 1930-1940." In *Mich. Historical Rev.* 15, Spring 1989, p69-92.

Rendall Rhoades and Annie Grieshop, eds., "The Celebrated Haines' Patent Fruit Jar: The Story of Colonel Joel Haines, Its Inventor, and the J. W. Carter Glass Works, Its Manufacturer." In *Hayes Historical J.* 7, Summer 1988, p29-42.

William G. Robbins, **Hard Times in Paradise: Coos Bay, Ore., 1850-1986.** U. of Wash. Pr. (Seattle), 1988. 208p. \$30/15 pap. Lumbering. Rev.: *JEH* 49, Sept. 1989, p772-4.

Steven R. Sears, "The Krause Plow Corp." In *Heritage of the Great Plains* 21, Summer 1988, p26-31.

Ehud Spanier, ed. **The Royal Purple & the Biblical Blue: Argaman and Tekhelet.** Keter (Jerusalem), 1987. 220p, illus., notes. \$?? Ancient textile dyeing processes. Rev.: *T&C* 30, July 1989, p667-8.

Peter H. Spitz, **Petrochemicals: The Rise of an Industry.** John Wiley (NY), 1988. 605p, figures, tables, notes, appendix, indexes. \$30. Rev.: *T&C* 30, July 1989, p710-11.

Dennis James Starr, "The Limits of Conservative Unionism: The Rubber Strike of 1904 in Trenton, N.J." In *New Jersey History* 106, Fall/Winter 1988, p1-22.

Leslie J. Stegh, "Putting America in the Driver's Seat: the Deere-Clark Motor Car Co." In *Ill. Historical J.* 81, Winter 1988, p242-54.

Marie Tedesco, "The Rayon Plants in Elizabethton, Tenn.: A Case Study of Appalachian Economic Development, 1925-88." In *Locus* 1, Spring 1989, p47-67.

[Textile industry:] SHOT's Leonardo Da Vinci Medal for 1988 was presented to Sidney M. Edelstein for his work in building the Dexter Chemical Corp. into an innovative leader in chemical dyeing processes; his translations of 16th-C works on dyeing; his 1972 *Historical Notes on the Wet-Processing Industry*; the Sidney M. Edelstein Collection in the History of Chemistry and Chemical Technology at Hebrew University, Jerusalem; etc. For the award text and Edelstein's very interesting remarks on his own life and his work with mercerization and other textile processes, see *T&C* 30, July 1989, p612-20.

Ross Thomson, **The Path to Mechanized Shoe Production in the U.S.** U. of N.C. Pr. (Chapel Hill), 1989. 300p, illus. \$40.

Steven Tolliday & Jonathan Zeitlin, eds., **The Automobile Industry and Its Workers: Between Fordism and Flexibility.** Polity Pr. (Oxford), 1987. 343p, charts, tables, notes, index. [£]35. 1930s-1980s. Rev.: *BHR* 62, Winter 1988, p720-22.

Zaragosa Vargas, "Life & Community in the 'Wonderful City of the Magic Motor': Mexican Immigrants in 1920s Detroit." In *Mich. Historical Rev.* 15, Spring 1989, p45-68.

Vincent Vinikas, "Lustrum of the Cleanliness Institute, 1927-1932." In *J. of Social Hist.* 22, Summer 1989, p613-30. Promotional program of the Assoc. of Amer. Soap & Glycerine Producers, for public service & profit.

Bennett H. Wall, **Growth in a Changing Environment: A History of Standard Oil Co. (N.J.), Exxon Corp., 1950-1975.** McGraw-Hill (NY), 1988. 1067p. \$40. Chemicals (incl. fertilizer) as well as oil, world-wide. Rev.: *JAH* 76, Sept. 1989, p655-6.

Charles H. Wendel, **The Allis Chalmers Story.** Crestline Publishing (Sarasota FL), 1986? 372p, illus. \$35. Mfr. of electrical & agricultural equipment, from 1842.

Charles Woolfson & John Foster, **Track Record: The Story of the Caterpillar Occupation.** Verso (London & NY), 1988. 304p. [L]10. Worker occupation to fight plant closing of Uddington plant near Glasgow, Scotland. Rev.: *Labor Hist.* 30, Spring 1989, p294-300.

Gerald Zahavi, **Workers, Managers, and Welfare Capitalism: The Shoeworkers and Tanners of Endicott Johnson, 1890-1950.** U. of Ill. Pr. (Champaign), 1988. 274p, illus., tables, appendix, notes, bibliog., index. \$25. Rev.: *BHR* 62, Winter 1988, p713-14.

Gregory R. Zieren, "A Century of Meatpacking & Packinghouse Labor in Chicago." In *Annals of Iowa* 49, Spring 1989, p692-709.

Dianne Newell [SIA], "The Rationality of Mechanization in the Pacific Salmon-Canning Industry before the Second World War." In *BHR* 62, Winter 1988, p627-55. Blending of hand- and mass-production technologies. By the author of the forthcoming **The Development of the Pacific Salmon-Canning Industry: A Grown Man's Game.**

MATERIALS

Edmund Berkeley & Dorothy Smith Berkeley, **George William Featherstonhaugh: The First U.S. Govt. Geologist.** U. of Ala. Pr. (Tuscaloosa), 1988. 374p. \$40. F examined geology & mineral deposits, 1834-37, esp. in Ark., Wis. Ter., & the Cherokee lands; also involved with RRs. Rev.: *JAH* 76, Dec. 1989, p928-9.

Robert Colls, **The Pitmen of the Northern Coalfield: Work, Culture, & Protest, 1790-1850.** Manchester U. Pr. (Manchester UK), 1987. 403p. ??? Rev.: *Histoire sociale—Social History* 21, Nov. 1988, p375-6.

Alan Derickson, "On the Dump Heap: Employee Medical Screening in the Tri-State Zinc-Lead Industry, 1924-1932." In *BHR* 62, Winter 1988, p656-77. Silicosis diagnostic clinic at Picher, Okla., operated by T-S Z&L Ore Producers Assn.; disabled workers discharged without compensation.

Michael Earle, "The Coalminers & Their 'Red' Union: The Amalgamated Mine Workers of Nova Scotia, 1932-36." In *Labour/Le Travail* 22, Fall 1988, p99-138.

John A. Fitch, **The Steel Workers.** U. of Pittsburgh Pr. (Pittsburgh), 1989 reprint. 405p. \$40/15 pap.

"Homestead: The Story of a Steel Town." Exhibition.
Homestead: The Story of a Steel Town, by Curtis Miner. 1989. 67p. \$10.
"Steel Town: Teaching about Growth & Change in Western Pa. Steel Towns, 1860-1945." Curriculum materials. \$30. All from Historical Society of Western Pa. (4338 Bigelow Blvd., Pittsburgh PA 15213). Illus. rev. in *JAH* 76, Dec. 1989, p881-9.

David Houston, "When Will We Ever Learn: the Lesson of Steel." In *Pittsburgh History* 72, Winter 1989, p46-55.

Builder Levy, **Images of Appalachian Coalfields.** Temple U. Pr. (Phila. PA), 137p. \$25.

Priscilla Long, **Where the Sun Never Shines; A History of America's Coal Industry.** Paragon House (NY), 1989? 400p, illus., maps. \$25. To 1920.

Luciana & Tiziano Mannoni, **Marble; the History of a Culture.** Facts on File Publications (NY), 1989? 284p, illus. (some color), appendix, bibliog., index. \$35. Incl. technology, p67-150.

James R. Pfluger, "Fuel for Victory: Texas Panhandle Petroleum, 1941-45." In *Panhandle-Plains Historical Rev.* 62, 1989, p19-56.

Marilyn D. Rhinehart, **A Way of Work and a Way of Life: Coal Mining & Coal Miners in Thurber, Texas, 1888-1926.** Ph.D. thesis, U. of Houston, 1988.

Jack B. Ridley, "Mining & Mfg. in a Frontier Environment: The Iron Industry in S. Central Missouri in the 19th C." In *Locus* 1, Spring 1989, p31-45.

Barbara Ellen Smith, **Digging Our Own Graves: Coal Miners and the Struggle Over Black Lung Disease.** Temple U. Pr. (Phila.), 1987. 285p, notes, index. \$25. Rev.: *T&C* 30, July 1989, p700-01.

George David Smith, **From Monopoly to Competition: The Transformations of Alcoa, 1888-1986.** Cambridge U. Pr. (NY), 1988. 588p. \$30. Aluminum Co. of Amer.; "the greatest mfg. monopoly in the 20th-C U.S." Rev.: *JAH* 76, Dec. 1989, p951.

Charles Wrege & Ronald G. Greenwood, "Origins of Midvale Steel (1866-1880): Birthplace of Scientific Management." In *Essays in Economic & Business History* 7, 1989, p205-19.

Robert H. Zieger, **John L. Lewis: Labor Leader.** Twayne Publ. (Boston MA), 1988. 238p, illus., notes, bibliog., index. \$25. Coal.

TRANSPORT

Dan Abbott, **Colorado Midland Rwy.: Daylight Through the Divide.** Sundance Publications (250 Broadway, Denver CO 80203), 1989? 376p, illus.

Priscilla M. Benham, **Texas City: Port of Industrial Opportunity.** Ph.D. dissertation, Univ. of Houston (TX), 1987.

Roger Bilstein, **Flight Patterns: Trends of Aeronautical Development in the U.S., 1918-1929.** U. of Ga. Pr. (Athens), 1984. 248p. \$21 orig./\$7 sale price.

Jan Bohlin, **Svensk varvsindustri, 1920-1975: Lönsamhet, finansiering och arbetsmarknad [The Swedish Shipbuilding Industry, 1920-1975: Profitability, Financing, & the Labor Market].** U. of Gothenburg (Göteborg), 1989. 432p.

Michael R. Bonavia, **The Channel Tunnel Story.** David & Charles (N. Pomfret, VT), 1987. 173p, illus., appendixes, index. \$25. Rev.: *T&C* 30, July 1989, p701-2. English channel, 1802-present.

David G. Casdorph, "Sixty-foot Appliance Cars." In *RR Model Craftsman* Oct. 1989, p82-7. Color illus.; cars with 10-ft. doors; pneumatic bulkheads.

Paul Ceruzzi, **Beyond the Limits: Flight Enters the Computer Age.** MIT Pr. (Cambridge, MA), 1989? \$17.50 pap.

Gordon Chappell, **To Santa Fe by Narrow Gauge: the D&RG's Chili Line.** Colo. RR Museum (POB 10, Golden CO 80402), 198? Reprinted & enlarged from the orig. in *Colo. Rail Annual* No. 7 (1969). 56p. illus. \$6.

Michael C. Connolly, **The Irish Longshoremen of Portland, Me., 1880-1923.** Ph.D. thesis, Boston College, 1988.

Tom D. Crouch, **The Bishop's Boys: A Life of Wilbur & Orville Wright.** W. W. Norton (NY), 1989. \$23. Rev.: *American Heritage of Invention & Technology* 5, Fall 1989, p6.

Gary S. Dewar, "Changes in the Existing Bulk Fleet." In *Inland Seas* 45, Summer 1989, p95-116.

Cynthia J. Eiseman & Brunilde S. Ridgway, **The Porticello Shipwreck: A Mediterranean Merchant Vessel of 415-385 B.C.** Texas A&M U. Pr. (College Station), 1987. 138p, illus., tables, notes, bibliog., index. \$90. Rev.: *T&C* 30, July 1989, p668-9.

James J. Flink, **The Automobile Age.** MIT Pr. (Cambridge MA), 1988. 470p. \$25. International, to present. Rev.: *JAH* 76, Sept. 1989, p632; *JEH* 49, Sept. 1989, p779.

James J. Flink, "Memorial: John Bell Rae (1911-1988)." In *T&C* 30, July 1989, p718-22. Obit. on SHOT founder; "dean of American automobile historians," who also studied the aircraft industry.

Joshua A. Fogel, ed. & trans., **Life Along the South Manchurian Rwy.: The Memoirs of Itō Takeo.** M. E. Sharpe (NY), 1988. 272p. Takeo a member of the SMR research arm that compiled major studies on China. Rev.: *Histoire sociale—Social History* 21, Nov. 1988, p381-2.

Michael J. Freeman & Derek H. Aldcroft (eds.), **Transport in Victorian Britain.** Manchester U. Pr. (Manchester, U.K.), 1988. 317p. \$40. Sequel to Aldcroft & Freeman, *Transport in the Industrial Revolution* (MUP, 1983; noted in *PoFI* 15-4, Winter 1986). Incl. RRs, urban transport, shipping, ports; ignores roads & canals. Rev.: *JEH* 49, Sept. 1989, p735-6.

Freight Cars Journal 6, No. 32, Oct. 1989, includes illus. articles on SP/Cotton Belt covered hoppers, Kansas City Southern heavy capacity flat cars, 2-bay covered hoppers from the 1940s-50s. Avail.: Society of Freight Car Historians (c/o David G. Casdorph, POB 2480, Monrovia CA 91017). Also announcing two new pubs, both \$10/2 issues, from SFCH, same address: **Journal of Container Transport** and **Journal of Railway Tank Cars**.

Margaret B. W. Graham, "R&D & Competition in England & the U.S.: the Case of the Aluminum Dirigible." In *BHR* 62, Summer 1988, 261-85.

Edward Hagerman, **The Amer. Civil War & the Origins of Modern Warfare: Ideas, Organization, & Field Command**. Ind. U. Pr. (Bloomington), 1988. 384p. \$38. Incl. important analysis of patterns of supply transportation. Rev.: *JAH* 76, Dec. 1989, p939-40.

James R. Hansen, "Aviation History in the Wider View." Review essay in *T&C* 30, July 1989, p643-56

John S. Harris, "An Airplane is Not a Bird." In *American Heritage of Invention & Technology* 5, Fall 1989, p18-22. Design.

Edward Kenneth Haviland, "American Steam Navigation in China, 1845-1878." In *American Neptune* 49, Winter 1989, p21-28.

Eric E. Hirsimaki, **The Nickel Plate Years**. Mileposts Publishing (3963 Dryden Dr., N. Olmsted OH 44070), 1989. 144p, illus. (some color), maps, rosters. \$37/27 pap. Nickel Plate RR motive power to 1964 merger.

Rosemary S. Hritsko, **The White Motor Story**. Ph.D. thesis, Univ. of Akron (OH), 1988.

Jeffrey N. Lash, "Joseph E. Johnston & the Virginia Railways." In *Civil War History* 35, Mar. 1989, p5-27.

Pamela E. Mack, "Space History." Review essay in *T&C* 30, July 1989, p657-65.

Main Streets of the Northwest: Rails from the Rockies to the Pacific. Vol. 1: Ore., Ida., Mont. Interurban Pr. (Glendale CA), 1989. 160p, 287 duotone photos. \$45. 1969-88 period. Vol. 2 to cover Wash. & B.C.

Mainline Modeler 10, Sept. 1989, includes UP ore gondolas for Anaconda copper concentrators, Wisconsin Central diesel painting guide (some color), Rock Island 1927-1930 automobile box car, Santa Fe concrete interlocking tower, 1886 Erie combination depot at Waldwick, N.J., and ads for a modular HO-scale industrial structure system (Design Preservation Models, POB 280, Crestone CO 81131). And here's your chance to get your very own model snow crystals (fluffy-wet, cold-dry, and slushy; Vintage Reproductions, 2606 Flintridge Dr., Colorado Springs CO 80907). — Oct. 1989 includes GP38 & GP30 diesels, GN Oriental Limited tourist sleeper cars of 1907, WP 2-8-8-2 dwgs., New Orleans Public Belt RR 1927 roundhouse w/ dwgs., and C&O Pikeville, Ky., depot. — Nov. 1989 includes diesels, Madison, Ga. depot, GN Oriental Limited sleeping cars, Rock Island auto cars, CB&Q/Seaboard Air Line cement hoppers, Santa Fe stock cars, oil tank car body used for stationary storage.

Terry Metcalfe, **Union Pacific Freight Cars**. Metcalfe Publications (POB 4811, Englewood CO 80155-4811), 1989. 216p, illus. \$25. 1936-51.

Suzanne Morton, "Labourism & Economic Action: The Halifax Shipyards Strike of 1920." In *Labour/Le Travail* 22, Fall 1988, pp67-98.

Thomas J. Oertling, "A Suction Pump from an Early 16th-C Shipwreck." In *T&C* 30, July 1989, p584-95. Spanish; British West Indies.

David E. Outerbridge, "Chugging to Extinction: Winston Link Caught the Last Days of the Steam Engine." In *Connoisseur* 219, Dec. 1989, p122-7. Spectacular night shots of Norfolk & Western steam, 1955-1960. *Wall St. J.* [1] used 3 photos in 1986 article; many others appeared in *Steam, Steel & Stars* (Abrams, 1987); color shots to be seen in 1991 exhibition. Also avail.: 6 LP records of loco & train sounds (descr. p126), \$12.95 ea., O. Winston Link, POB 75, S. Salem NY 10590; photo prints, Robert Burge/20th C Photographs, NYC, 212-861-4520.

Richard Palmer, "Commercial Sailing on the Finger Lakes." In *Inland Seas* 44, Fall 1988, p176-89.

Robert W. Passfield, **Technology in Transition, the 'SOO' Ship Canal, 1889-1985**. Canadian Govt. Publishing Centre (Supply & Services Canada, Hull, Quebec K1A 0S9), 1989. 226p, illus. \$17 pap. Construction of the ship canal at Sault Ste. Marie, Ont., its electrification, & the dev. of the emergency swing bridge dam erected to protect the canal.

Hugh B. Peebles, **Warshipbuilding on the Clyde: Naval Orders and the Prosperity of the Clyde Shipbuilding Industry, 1889-1939**. John Donald (Edinburgh), 1987. 210p. \$45. *AHR* 94, Dec. 1989, p1381-2.

Henry Petroski, "H.D. Thoreau, Engineer." In *American Heritage of Invention & Technology* 5, Fall 1989, p8-16. T as mfg. engineer for the J. Thoreau & Co. lead pencil works, & as surveyor. Adapted from **The Pencil: A History of Design & Circumstance**, to be pub. by Knopf in Jan. 1990.

David Plowden, "A Time of Trains." Photos and text excerpted from the 1987 book, in *Timeline* (Ohio Hist. Soc.) 6, Aug.-Sept. 1989, p2-17.

Bryce Poe, "Early Jet Flying." In *Air Power Hist.* 36, Spring 1989, p43-45.

James N. Price, **The Railroad Stations of San Diego County: Then and Now**. Price & Seiber (POB 6772, San Diego CA 92106), 1988? 58p, illus. \$6 ppd., pap. Rev.: *Pacific Rail News* No. 310, Sept. 1989, p40-41.

Bruno Ramirez, "Brief Encounters: Italian Immigrant Workers & the CPR." In *Labour/Le Travail* 17, Spring 1986, p9-27. Canadian Pacific RR.

Marcus Rediker, **Between the Devil and the Deep Blue Sea: Merchant Seamen, Pirates, and the Anglo-American World, 1700-1750**. Cambridge Univ. Pr. (NY), 1987. 336p. \$25. Incl. imaginary tour of major British N. Amer. ports, c.1740. Marxist, overly-roseate view of pre-industrial world, according to rev. in *J. of Social Hist.* 22, Summer 1989, p769-72.

John W. Reps, **Saint Louis Illustrated: 19th C Engravings & Lithographs of a Mississippi R. Metropolis**. U. of Mo. Pr. (Columbia), 1989. 208p. \$38.

Daniel Rosenberg, **New Orleans Dockworkers: Race, Labor, and Unionism, 1892-1923**. SUNY Pr. (Albany), 1988. 243p, notes, bibliog., index. \$45/15 pap. Rev.: *BHR* 62, Winter 1988, p710-11; *AHR* 94, Dec. 1989, p1482-3.

Lorenz P. Schrenk and Robert L. Frey, **Northern Pacific Diesel Era, 1945-1970**. Golden West Books (San Marino CA), 1988. 299p, illus., maps, roster, \$58. Rev. in *Pacific Rail News* No. 310, Sept. 1989, p40, considers it "the best book to date" on a RR dieselization program.

Ship preservation is the focus of *CRM Bulletin* 12, No. 4, 1989 (U.S. National Park Service, Cultural Resources Management, POB 37127, Wash. DC 20013-7127), incl. overview and historical background of maritime preservation; articles on shipwreck research, archival sources, and nondestructive documentation of shipwrecks; a note on the Bicentennial Lighthouse Fund; and case studies of the Mississippi River steamboat *Delta Queen* as an operating historic vessel, the 1884 Maine coast tugboat *Seguin* as a ship ultimately not restorable, and the Calif. steamship *Wapama* as an example of remedial treatment of dry rot in a large wooden structure, through sodium borate soaking.

Albert B. Stephenson, "Secrets of the Model T." In *Amer. Heritage* 40, July/Aug. 1989, p73-77.

M. Mark Stolarik, **Forgotten Doors: the Other Ports of Entry to the U.S.** Philadelphia, 1988. Incl. Baltimore, Boston, Los Angeles, New Orleans, Phila., Miami, San Francisco.

David Syrett, "H.M. Storeship *Porpoise*, 1780-83." In *American Neptune* 49, Spring 1989, p91-95.

Spencer C. Tucker, "U.S. Navy Steam Sloop *Princeton*." In *American Neptune* 49, Spring 1989, p96-113.

David M. Vrooman, "The Cooperative Traffic Program: Employee Participation in the Baltimore & Ohio RR, Phase 2." In *Essays in Economic & Business History* 7, 1989, p159-75.

John Hoyt Williams, **A Great and Shining Road: The Epic Story of the Transcontinental Railroad**. Times Books (NY), 1988. 341p, maps, illus., notes, bibliog., index. \$23. Union Pacific / Central Pac. RRs, 1862-69.

N. J. Williams, **The Maritime Trade of the East Anglian Ports, 1550-1590**. Oxford U. Pr. (NY), date?? 338p. \$64. Rev.: *JEH* 49, Sept. 1989, p728-30.

Joseph F. Wilson, **Tearing Down the Color Bar: A Documentary History and Analysis of the Brotherhood of Sleeping Car Porters**. Columbia U. Pr. (NY), 1989. 406p. \$45.

James A. Young & Jerry Budy, **Endless Tracks in the Woods**. Crestline Publishing (Sarasota FL), 1989. 308p, illus., appendix, index. \$?? Logging transport technology from animal-power & flumes to present, incl. pre-tractor methods, steam tractors and log haulers, tracklayers, big wheels, motor trucks, tracked loaders; Best, Holt, & misc. mfrs.

STRUCTURE

Architectural Graphic Standards. 1st ed., 1932 [facsimile]. Wiley (NY), 1989? 200 + p of detail dwgs. \$75 (\$135 for limited ed.).

Carl M. Becker & Patrick B. Nolan, **"They Gathered at the River."** In *Timeline* (Ohio Hist. Soc.) 6, Oct.-Nov. 1989, p34-47. Arthur E. Morgan & the Miami [River] Conservancy District, Dayton, Ohio, vic., from 1913 flood to 1923 completion, incl. levees, dredging, dams with "hydraulic jumps" (first of their kind), worker housing.

The Bridge Works: A History of the Chicago Bridge & Iron Co. Mobium Pr. (Chicago), 1987. 253p, illus. \$? Centennial history; rich with primary info on their pioneering water tanks and towers; "a story of what men and women did to iron and what iron and steel did to them." —D.S.

Edwin Cordes, **"The Grand Ave. Viaduct."** In *Milwaukee History* 11, Autumn 1988, p79-88.

John Fitchen, **Building Construction Before Mechanization.** MIT Pr. (Cambridge, MA), 1986. 326p, illus. \$25 now avail. in pap.: \$12. [Prev. noted in Poff 16-1 Spring 1987.] All structures, all times, all places, incl. dikes, dams, bridges, earthen fortifications.

Robert M. Frame III [SIA], **James J. Hill's St. Paul: A Guide to Historic Sites.** James Jerome Hill Reference Library (80 W. 4th St., St. Paul MN 55102), 1988. 32p, illus., maps. \$4. Published as part of the 150th anniversary celebration of the birth of James J. Hill, president of the Great Northern Ry. Includes text and illus. related to GN RR shops and offices, St. Paul's warehouse district, Hill's Summit Avenue mansion, and his 245-ft. steam yacht, as well as the firms at which the Hills shopped and the homes of the friends they visited. A nice reminder of the SIA 1983 Annual Conference.

Clayton B. Fraser [SIA], **"Bridges of Yesteryear."** In *Arizona Highways* 65, July 1989, p30?37-41. Color illus.; notes 81 "venerable" Ariz. bridges added to the National Register.

Joanne Goldman, **The Development of a Sewer System in New York City, 1800-1866: Evolution of a Technological & Managerial Infrastructure.** Ph.D. thesis, State U. of N.Y., Stony Brook.

Elizabeth Barret Gould, **From Fort to Port: An Architectural History of Mobile, Ala., 1711-1918.** U. of Ala. Pr. (Tuscaloosa), 1988. 327p. \$40. Rev.: *AHR* 94, Dec. 1989, p475-6.

Richard E. Greenwood, **"Zachariah Allen & the Architecture of Industrial Paternalism."** In *Rhode Island History* 46, Nov. 1988, p117-35.

Walt Griffin, **George W. Goethals & the Panama Canal.** Ph.D. thesis, U. of Cincinnati, 1988.

HABS/HAER drawings of Thurmond and Hinton, W.Va. 11 2' x 3' drawings (8 showing every structure — both RR & commercial — in Thurmond; 3 of Hinton; with plat maps of both). Avail. for \$35.50 rolled in tube from Chesapeake & Ohio Historical Society, 303 Aaron Ct., Sterling VA 22170.

Harold Hall, **Great Northern's 2-Story Depots: The 20' x 64' Standard Plan of 1887.** GN Rwy. Historical Society (1781 Griffith, Berkley MI 48072-1222), Reference Sheet 153, Sept. 1989. 14p.

Elizabeth Humphrey, **"The Restoration Arts."** In *Historic Preservation* 42, Jan./Feb. 1990, p52-. Finding craftspeople, incl. mill, plaster, & ironworking.

John A. Jakle et al, **Common Houses in America's Small Towns: the Atlantic Seaboard to the Mississippi Valley.** U. of Ga. Pr. (Athens), 1988. 256p, illus., photos, maps, charts. \$50/25 pap. Based on an inventory of 17,000 houses in 20 sample towns, to 1980s.

H. Ward Jandl & Katherine Stevenson, **"Special Delivery: Houses by Sears."** In *Timeline* 6, Feb.-Mar. 1989, p2-3.

Kim Keister, **"Restoration 101."** In *Historic Preservation* 42, Jan./Feb. 1990, p20-23. Restoration & preservation carpentry, masonry, & many other crafts taught at Eastfield Village (E. Nassau NY 12062).

Laton McCartney, **Friends in High Places — the Most Secret Corporation and How It Engineered the World.** Simon & Schuster (NY), 1988. 273p, illus., notes, index. \$20. Bechtel Corp., 1906-present, incl. Boulder Dam, Liberty ships, oil industry, nuclear power. Rev.: *T&C* 30, July 1989, 702-4.

George T. Morgan & John O. King, **The Woodlands: New Community Development, 1964-1983.** Tex. A&M U. Pr. (College Station), 1987. 174p, maps, illus., charts, bibliog., notes, index. \$28. Woodlands, Houston, Tex., vic., the only surviving "New Town" development, due to "financial strength and relentless commitment" of George Mitchell of the Mitchell Energy & Development Corp. Rev.: *BHR* 62, Winter 1988, p717-18.

Joel Novek, **"Grain Terminal Automation: A Case Study in the Control of Control."** In *Labour/Le Travail* 22, Fall 1988, p163-80.

Old-House Journal 17, Sept.-Oct. 1989, includes articles (with some color illus.) on use & repair of zinc comes in art-glass windows, p35-38; shingle-style architecture, p41-46.

James E. Sherow, **"Watering the Plains: An Early History of Denver's Highline Canal."** In *Color. Heritage*, no. 4, 1988, p2-13.

Peter H. Smealie & Peter H. Smith, **New Construction for Older Buildings: A Design Sourcebook for Architects & Preservationists.** Wiley (NY), avail. Apr. 1990. 320p. \$50. Additions, alterations, new construction, rehabs.

Dwight A. Smith et al, **Historic Highway Bridges of Oregon.** Ore. Hist. Soc. Pr. (Portland), 1989. 328p, illus., bibliog., glossary, appendixes, index. \$20 pap. First pub. ca.1986 by the Ore. DOT; noted in Poff 16-1, Spring 1987.

Joseph E. Stevens, **Hoover Dam: An American Adventure.** U. of Okla. Pr. (Norman), 1988. 335p. \$25. Colo. R., Nev., 1931-1936. Rev.: *AHR* 94, Dec. 1989, p1486-7.

Amasa Stone articles in *Timeline* (Ohio Hist. Soc.) 6, June-July 1989: — Eric Johannesen, **"Stone's Trove: the Legacy of an American Oligarch,"** p26-33. Biog.; mansion; Cleveland Union Passenger Depot (1864-66). — David A. Simmons [SIA], **"Fall from Grace: Amasa Stone & the Ashtabula Bridge Disaster,"** p34-43. Ashtabula, Ohio, RR bridge (1865), collapsed 1876.

Technology & Conservation 10, Spring 1989, includes a reprint of 1870 patent specifications for a sand-blasting device (p2, 14-16) and an article by Nicolas F. Veloz & W. Thomas Chase, **"Abrasive Cleaning of Statuary & Other Structures: A Century of Technical Examination of Blasting Procedures"** (p18-27), as well as notes on borescope assessment of historic works (p5-8) and restoration of the 1877 iron bark *Elissa*, now berthed at Galveston, Tex. (p8-10).

Dell Upton & John Michael Vlach, **Common Places: Readings in American Vernacular Architecture.** U. of Ga. Pr. (Athens), 1986. 560p, photos, drawings. \$50/25 pap.

James B. Waldram, **As Long as the Rivers Run: Hydroelectric Development & the Native Communities in Western Canada.** U. of Man. Pr. (Winnipeg), 1988. 271p. \$25. Manitoba & Sask. projects. Rev.: *JAH* 76, Dec. 1989, p991.

Sharon Wood, **The Portland Bridge Book.** Ore. Hist. Soc. Pr. (Portland), 1989. 120p, pen & ink illus., appendixes, bibliog. \$13 pap. Portland, Ore./Vancouver, Wash. bridges over Willamette R.

Mary Woods, **"The First American Architectural Journals: The Profession's Voice."** In *J. of the Soc. of Architectural Historians* 48, June 1989, p117-38.

Abbreviations used in this Poff:

- **AHR:** American Historical Review
- **BHR:** Business History Review
- **JAH:** Journal of American History
- **JEH:** Journal of Economic History
- **RRH:** Railroad History
- **T&C:** Technology & Culture

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 (612-222-5628 or 224-0028).

SITES & STRUCTURES

LANDMARK "A" MILL DRAWINGS TAKE PETERSON HONORABLE. Students at the Univ. of Minnesota's School of Architecture and Landscape Architecture who prepared Historic American Buildings Survey (HABS) drawings of the Washburn "A" Mill [NHL] at St. Anthony Falls in Minneapolis received one of four Honorable Mentions in the 1989 Charles E. Peterson Prize competition. Announced at the Fall meeting of the American Inst. of Architects' Committee on Historic Resources in Chicago, the Peterson Prize is an annual award for the best sets of architectural measured drawings of a historic building produced by students and given to HABS. The Prize honors Charles E. Peterson [SIA], founder of the HABS program. The famed flour mill, built in 1879 for the Washburn Crosby Co., later General Mills, Inc., was viewed during the 1983 SIA Annual Conf. in the Twin Cities. It is the only industrial or engineering structure among the seven 1989 Peterson winners. The Washburn "A" Mill drawings were produced through a cooperative program between the U. of M. and the State Historic Preservation Office of the Minnesota Historical Society using Historic Preservation funds. For additional info. about this and the 1990 competition, contact John A. Burns, Principal Architect HABS/HAER, NPS, POB 37127, Wash. DC 20013-7127 (202-343-9602).

T.C.G.

INDIANA COTTON MILL NEEDS DEVELOPER. Historic Cannelton, Inc., owner of the Indiana Cotton Mill [NR, HAER], seeking the assistance of SIA members in stimulating development work for the mill, which was built 1849-51 on the Ohio River in Cannelton. The massive, five-story limestone mill reportedly was part of the largest industrial complex west of the Alleghenies when it opened. It, and the town, were modeled on Lowell, Mass., with which they were to compete. The mill operated until 1954. The handsome building is available for \$25,000. Info.: Mary Lou Froehle, HCI Board, Foxtail Ridge, RR3 Box 198, Petersburg IN 47567 (812-354-6511).

POMPTON IRONWORKS QUERY. Sheffield Archaeological Consultants seeks information for their intensive historical and archeological investigation of the Pompton Ironworks and village site on the Ramapo River in the borough of Pompton Lakes, Passaic County, N.J. As the location of extensive ironworking activity from c1726 to c1908, Pompton once boasted a bloomery, blast furnace, steelworks, workers' housing, school, store, post office, church, and access to the Morris Canal. The work, supported by the Pompton Lakes Historic Preservation Commission, may result in state and National Register nominations and a documentary publication. If you have photos, records, or personal reminiscences of Pompton, contact Edward J. Lenik [SIA], SAC, POB 437, 24 High St., Butler NJ 07405-0437 (201-492-8525).

SNYDER GETS NHL STATUS. The Ohio Historical Society's sternwheel river towboat, the *W.P. Snyder, Jr.*, America's last remaining steam-powered towboat of its kind, has been designated a National Historic Landmark. The 175' *Snyder* was built in 1918 as the *W.H. Clingerman* for the Carnegie Steel Corp. In 1945, the Crucible Steel Co. of America bought it and rechristened it after Crucible's president. It was donated to OHS in 1955 and last year underwent a \$335,000 renovation. The *W.P. Snyder, Jr.*, is open to the public. Info.: Maggie Sanese or Mariann Bayus, OHS, 1982 Velma Ave., Columbus OH 43211 (614-373-3717).

J.I. CASE IN AG HALL OF FAME. J.I. Case, famed 19th-C manufacturer of agricultural machinery, was inducted into the National Agricultural Hall of Fame at Bonner Springs (near Kansas City), Kan., in Oct., joining Cyrus McCormick and John Deere. Jerome Increase Case (1819-91) is noted for inventing the modern threshing machine and developing the first agricultural steam engine, as well as other agricultural machines. In 1842, he founded the J.I. Case Co. in Racine, Wis., which continues today, under the parentage of Tenneco Corp. Appearing at the event was the 1870 Case Portable Steam Traction

Engine No. 25, owned by Sauder Farm & Craft Village, Archbold, Ohio, believed to be the oldest extant Case engine after Engine No. 1 at the Natl. Museum of American History, Smithsonian Inst. Built in 1869, the 8-HP No. 1 was found on a Minn. farm in 1925, returned to J.I. Case, and donated to the brand-new Museum of History & Technology (now the Natl. Museum of American History) in 1963, where it has been on exhibit ever since in the Hall of Agriculture. The 150th anniversary of Case's Racine works will be celebrated at the Labor Day, 1992, show of the Western Minnesota Threshers in Rollag, Minn., where planners anticipate the largest collection of mammoth 110-hp. Case steam-traction engines ever seen outside the Racine yards. Info.: J.I. Case Heritage Foundation, 204 E. Melbourne Ave., Silver Spring MD 20901 (301-587-5552 or -7014).

Federal IA dollars top SHPO total

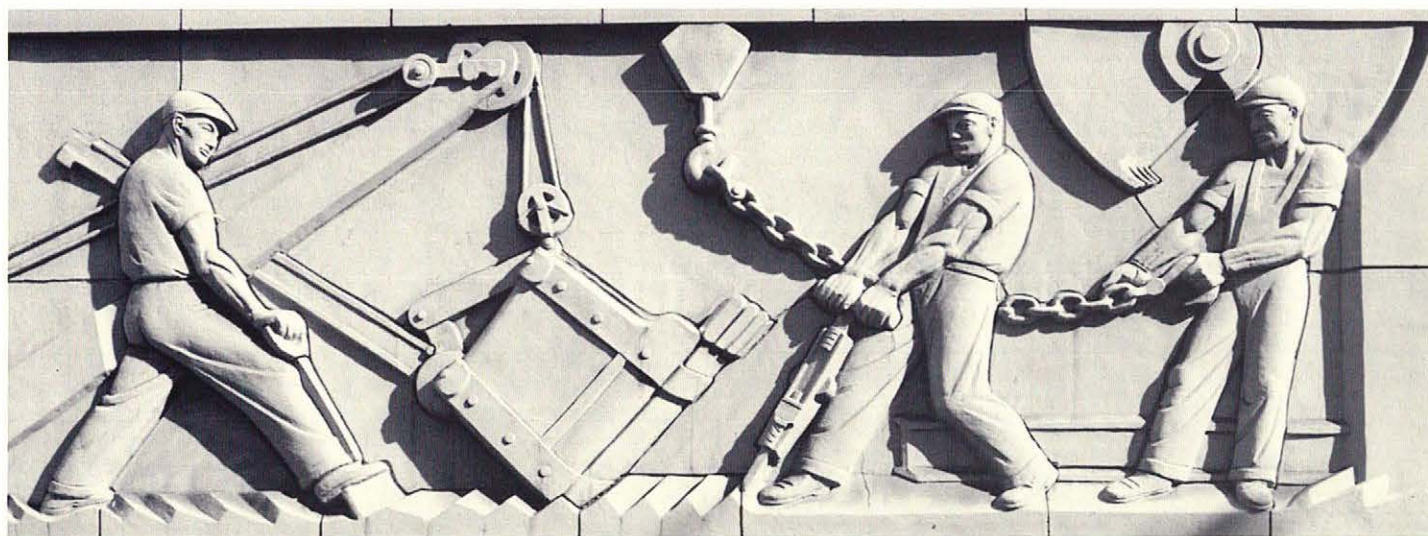
IA is coming into its own at the Federal level through a long list of Congressional actions that is pumping, literally, millions into industrial archeological work. It might come as an exciting surprise to discover the size and range of IA-related programs and projects funded in the Dept. of the Interior appropriations act signed by President Bush in Oct. In fact, the IA total of almost \$29 million tops the \$27 million from the Historic Preservation Fund which pays for all the State Historic Preservation Offices. IA items are as follows:

—Bicentennial Lighthouse Fund	\$1,000,000
—Ill. & Mich. Canal Natl. Heritage Corridor Commn.	250,000
—Johnstown [Pa.] Flood Museum	500,000
—Blackstone River Corridor Commn.	325,000
—Del. & Lehigh Navigation Canal project	350,000
—America's Industrial Heritage Project (AIHP)	8,332,000
—for Nat. Reg. nominations associated with AIHP	150,000
—for HABS/HAER work associated with AIHP	345,000
—Institute for His. of Technology & IA	600,000
—Steel Industry Heritage Task Force	100,000
—HAER office in Allegheny County, Pa.	135,000
—Recon Survey of western Pa. counties	75,000
—Carrie Furnaces/Homestead Works planning	25,000
—Salem, Mass., project	300,000
—Salem Maritime, historic wharves	2,630,000
—Steamtown	12,000,000
—Altoona Rail Memorial Museum (AIHP planning)	150,000
—Aluminum Heritage Research (AIHP planning)	50,000
—Bedford Transportation Museum (AIHP planning)	75,000
—Brownsville Recon Survey (AIHP planning)	110,000
—Saltsburg Canal (AIHP planning)	75,000
—St. Michael Historic District (AIHP planning)	50,000
—Somerset Center (AIHP planning)	220,000
—Allegheny Highlands Rails to Trails project (AIHP)	185,000
—Oral histories (AIHP planning)	185,000
—Mt. Etna Iron Furnace Complex (AIHP planning)	100,000
—Windber/Scalp Level Coal Heritage (AIHP planning)	100,000
—Scranton Heritage Park	150,000
—Coal Heritage Study, southern W.Va.	100,000
—Sloss Furnaces, Birmingham, Ala.	250,000
Total	\$28,917,000

These appropriations are over and above ongoing HAER program funding. At first glance much of the Congressional activity might be seen as pork barrel legislation, using historic preservation to pull federal dollars into depressed districts. But that view ultimately is too cynical, according to HABS/HAER Chief Robert Kapsch [SIA], who sees a widespread, less-than-conscious, national struggle with the end of a way of life, the decline of heavy industry in America. Little wonder that so many projects spring from Pennsylvania's iron-steel-coal-railroad nexus. Lowell National Historical Park has been a model for subsequent programs coming up from the Congressional grassroots, given the historic preservation leadership vacuum in the administrations of the 1980s.

Ed.

Cesare Stea's fieldwork lent IA documentary rigor to his sculpture



Excavation panel of Cesare Stea's *Steel Construction Workers*, Bowery Bay Sewage Treatment Works, Queens, N.Y. Terra cotta bas-relief, 6' x 20', 1940. Gerry Weinstein photo for Ohio Historical Society.

Cesare Stea (1893-1960), a sculptor active in the New York area in the first half of the 20th C, executed work in the styles popular throughout the 1930s. Influenced by Cubism and Italian Futurism, his sculptures were highly geometrical and almost roboticized in his treatment of human forms. Stea's work is of particular interest to industrial archeologists because of the care he took to insure the accuracy of his artistic renditions of industrial subjects. Whenever working on an industrial sculpture, rather than simply giving an impression of an activity, the artist made careful on-site observations and either took photographs himself or had them taken by associates. Consequently, his industrial works, although clearly "artistic" in nature, have a strong documentary sense.

One reviewer characterized Cesare Stea as having been especially interested in sculpting images of "mechanized man," but his total body of work was not limited to industrial subjects. Born in Bari in southern Italy, he emigrated to New York City as a youth. He resisted his father's desire that the boy follow in his footsteps as a flutist and began a serious art study with private lessons at age 14. After two years at the Beaux Arts Institute of Design and three at the Cooper Union Art School, he worked as an assistant with Victor D. Salvatore and Herman Atkins MacNeil, the latter of whom specialized in sculptures of American Indians. One of Stea's first major commissions came to him in 1914, a bas relief called *Education* for the Educational Building at the Pan American Exposition in San Francisco. After receiving the Helen Foster Barnett Prize for Sculpture from the National Academy of Design in 1926, he spent the next year in Paris at the Ecole de la Grande Chaumière studying under Antoine Bourdelle. While his sculpture won numerous awards and he exhibited in one-man shows at institutions as prestigious as the Metropolitan and the Whitney museums, he frequently found it necessary to supplement his income through teaching at several art schools in N.Y. and N.J.

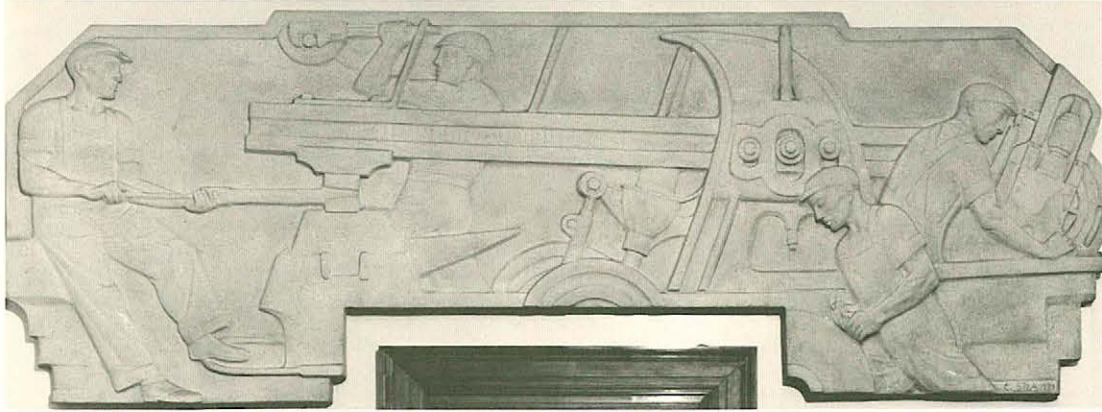
Much of his industrially oriented artwork was done in the late 1930s, while involved in federal work-relief art programs. One of his most important commissions was for a group of terra cotta panels intended for the facade of the Bowery Bay Sewage Treatment Works, constructed in Queens on Long Island in the 1940s. Four 6½'-high panels measuring a total of 55' in length represented the construction of the

plant itself, and was appropriately titled *Steel Construction Workers*. The panels illustrate the excavation of the foundation, assembly of the steelwork, pneumatic riveters, and pipe fitters. In this case Stea had a photographer working on N.Y.C.'s federal art programs produce images of the special plumbing characteristic of a sewage disposal plant to



Detail of facade of Bowery Bay Sewage Treatment Works, Queens, N.Y., showing two panels of *Steel Construction Workers* by Cesare Stea, 1940. These panels are each 6' x 7'. Gerry Weinstein photo for Ohio Historical Society.

Industry by Cesare Stea, Wyomissing, Pa., post office, 1941. Plaster bas-relief, 29" x 75". Courtesy National Archives.



Man and Machines by Cesare Stea, Newcomerstown, Ohio, post office, 1939. Plaster bas-relief, 4¼' x 11½'. Connie Girard photo for Ohio Historical Society.

insure the accuracy of his composition. Since the building was under construction as he prepared the artwork, the artist undoubtedly also spent time observing the workmen at the site.

Stea's most modernist and therefore least stylistically realistic industrial sculpture was one of two 9'-tall figures prepared to flank a

small stage in the Federal Building at the N.Y. World's Fair in 1940. One, titled *Industry*, showed a man with a jackhammer, while the other, a woman holding a sheaf of grain, was called *Agriculture*.

Stea won the competitions for two post office murals and both were bas reliefs incorporating industrial imagery. The mural at Wyomissing, Pa., was entitled simply *Industry*, and portrayed the picking of cotton, sheep farmers, and a weaver in a textile mill.

The Newcomerstown, Ohio, post office mural was the artist's other major federal commission and industrial artwork. It was prepared following a visit there to the Hellar Bros. Co., manufacturers of files and tools. Stea was obviously especially impressed by the drop hammer and made it the central feature of the composition. One workman operates a grinding wheel in the foreground, while another runs a cutting machine at the right. A fourth workman adjusts a pulley at the rear of the mural. The representation of the cutting machine operation virtually duplicates a photograph that was retained by Stea and that still exists among his papers in the Archives of American Art in the Smithsonian Inst.

In an interview given when the Newcomerstown mural was dedicated, Stea revealed some of his philosophy of public art. While experienced with abstract forms, he recognized that "modern art is not accepted by people other than artists." He strove to express "a feeling" in his art rather than simply reproducing beauty, and he felt the Newcomerstown bas relief combined both modern and "old fashioned" elements in a way "that is acceptable to the majority of people." His views were shared by many of his contemporaries. Renewed interest in Depression-era art will refocus attention on this neglected sculptor, his work, and other artists who recorded industrial scenes..

D.A.S.

[The Ohio work of Stea and others is discussed and reproduced in Gerald Markowitz & Marlene Park (photography by Connie Girard), "Not by Bread Alone: Post Office Art of the New Deal," *Timeline 6* (June-July, 1989): 2-25 (avail.: Timeline, Ohio Hist. Soc., 1985 Velma Ave., Columbus OH 43211. Ed.]

SIA AFFAIRS

NEWS OF MEMBERS

Former SIA president **Robert M. Vogel** and **Clifford Zinc**, ex. dir. of the Trenton Roebling Community Dev. Corp., were speakers at the Oct. 21 designation of the 1893 Roebling 80-Ton Wire Rope Machine [HAER: see *SIAN* Fall 86:11] as a National Historic Mechanical Engineering Landmark. The ceremony took place at the Roebling Site in Trenton, N.J., and received the rare honor of a write-up (sans mention of IA folks) in *The New Yorker's* "Talk of the Town" column of Nov. 6.

SIA President **Emory Kemp** was elected vice president of the Public Works Historical Society for 1989-90.

Howard Newlon, Jr., retired in Sept. as director of the Va. Transportation Research Council, a post he held since 1981. He joined the Council as a graduate student in 1956 and headed its concrete research program for almost 20 years. In 1986, he received an honor award from the National Trust for Historic Preservation for the work he initiated on the Council to develop procedures for the identification and evaluation of bridges with potential historic significance. In addition to his Virginia truss-bridge inventory work, SIA members know Howard for his tireless scholarly efforts in the history of concrete, particularly his decades of service with the American Concrete Institute. He intends to continue as a lecturer in the School of Architecture, Univ. of Va.

John M. Wickre, compiler of Publications of Interest for *SIAN*, has resigned as manuscripts cataloguer for the Minnesota Historical Society. He is pursuing freelance research and writing related to IA generally, to western North American railroads, and to computer multimedia projects. JMW is at 928 Goodrich Ave., St. Paul MN 55105 (612-222-5628; msg: 612-224-0028).

Greg Galer has been appointed Coordinator of Industrial History at the Valentine Museum, 1015 East Clay St., Richmond VA 23219.

Richard K. Anderson, Jr., resigned his position as staff architect, Historic American Engineering Record, in Nov., following over eleven years of service. He currently is a consultant in IA documentation, technical illustration, and graphics. He is at 1800 Holly Hill Dr., West Columbia, S.C. 29169 (O: 803-796-1707; H: 803-796-4019).

Malone leaves Slater Mill

Patrick M. Malone, former SIA president, resigned on Nov. 15 as director of Slater Mill Historic Site, Pawtucket, R.I. Among Pat's notable accomplishments during his 15-year tenure was the construction, installation, and operation in the Wilkinson Mill of a governed breast wheel of a size and type indicated by documentary and archeological investigation. This wheel powers the 19th-C machine shop, which also was the result of efforts made largely during Pat's directorship. Pat's predecessor, Paul Rivard [SIA], was involved in the early stages of both projects.

Under Pat, the museum created a temporary exhibition gallery with an active program of impressive exhibits, along with an auditorium featuring an award-winning AV presentation. Pat fostered staff development and professionalization. Numerous curators served admirably at the mill before continuing their careers at other institutions nationwide. The efforts of all concerned led to accreditation and reaccreditation by the American Assn. of Museums. The museum and the community are indebted to Pat for his contributions in all these areas.

Pat continues as a Senior Lecturer at Brown Univ. and serves as a consultant in IA. In addition, he has been awarded one of two 1990 William F. Sullivan Grants-in-Aid by the Board of Trustees of the Museum of American Textile History, Andover, Mass. As a Sullivan Fellow, Pat will use his current research on incremental innovation in the textile and textile-machinery industries to complete a book he is writing with

Robert Gordon [SIA] of Yale Univ., titled *The Texture of Industry: An Archaeological View of the Industrialization of North America*.

Pat now resides at 53 Riverside Dr., Barrington RI 02806, where he claims to be able to kayak into Narragansett Bay from his back door.
L.G.

Sally Kress Tompkins

Sally Kress Tompkins, deputy chief, Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Div., National Park Service, died Nov. 27, following a long battle with cancer. Sally joined the HABS staff in 1978 as an architectural historian, specializing in the survey and documentation of federal installations, particularly military posts. Later, she led many HABS/HAER initiatives, such as the maritime initiative to develop measured drawings for historic ships. A graduate of Skidmore College, with an MA in historic preservation from George Washington Univ., she was active in the Society of Architectural Historians.

R.K.

CHAPTER NEWS

ROEBLING (greater N.Y.C. area). The chapter's **9th Annual Drew Symposium**, Nov. 11 at Drew Univ., Madison, N.J., attracted some 140 registrants. It was co-sponsored by the Drew Univ. Dept. of Anthropology and the N.J. SHPO, and coordinated by Tom Flagg. Attendees who had just returned from the SIA Fall Tour in Butte, Mont., were happy to find a Butte connection in the first paper, "The Non-Ferrous Metals Industry in Middlesex County, N.J." Jim Musser discussed the Raritan Copper Works, which became an Anaconda Co. subsidiary in 1914. Other presentations included: "Milk on the Rails: RRs & the Dairy Industry in the Northeast" (Robert E. Mohowski); "Rehab of an 1896 Deck Truss Bridge over the Rockaway River in Boonton, N.J." (Abba Lichtenstein & Joe Pullaro); "Submarine Escape Training Tank, Naval Submarine Base, Groton, Conn.: Documentation for HAER" (John R. Bowie); "'It Could Happen Here': A Wartime Film from Bethlehem Steel on What to Do if Your Steel Plant Is Bombed" (Lance Metz); "The Clock Stops: Colgate's Jersey Plant" (Gerry Weinstein); "Bloomery Iron & Crucible Steel: The N.Y.-N.J. Connection" (Robert B. Gordon); "Bull's Head Market: Evolution of a Live Animal Market in Manhattan" (Edward Rutsch & Pat Condell). Abstracts and presenters' addresses are avail. through Gerry Weinstein, RCSIA, 40 West 77th St., #17B, NY NY 10024 (chap. phone: 212-769-9082).

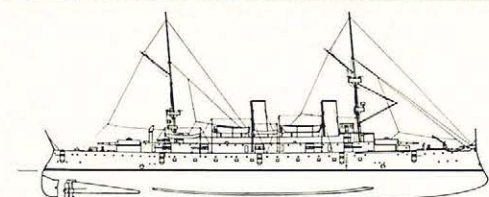
ONTARIO SOCIETY FOR IA. Distributed with the current *OSIA Bulletin* is the prototype "OSIA Recording Sheet," designed to help carry out the recording and documentation part of the organization's mandate. The provincial government is developing a recording format that can be used by anyone in either electronic or paper form, but until that system is completed the OSIA will use its own sheet. Some guidelines have been borrowed from the Assn. for IA in England. Info.: David Rollinson, OSIA Bulletin Editor, 73 Grove St., Guelph, Ontario N1E 2W6, Canada.

CONTRIBUTORS TO THIS ISSUE

John Bowie Assoc., Media, Pa.; R. John Corby, Gloucester, Ontario; Eric N. DeLony, HAER; Kathy Fisher, Furnace Town, Md.; Aarne H. Froben, Lansing, Mich.; Timothy C. Glines, Minnesota Historical Society; Laurence F. Gross, Museum of American Textile History; Mary Habstritt, Pace Univ., N.Y.; Robert Kapsch, HABS/HAER; Fredric Quivik, Butte, Mont.; Terry S. Reynolds, Michigan Technological Univ.; David A. Simmons, *Timeline*, Ohio Historical Society; Gerry Weinstein, New York City; and Helena E. Wright, Smithsonian Institution.

With thanks.

PHILLY GETS READY!



Above: Fairmount Water Works. Larry A. DeYoung photo. Left: USS Olympia. Courtesy Cruiser Olympia Assn. Inc.

The Oliver Evans Chapter SIA has been busy firming up plans for the SIA 19th Annual Conference in Phila., May 32-June 3, 1990. For early arrivals on Thursday, several brief pre-conf. IA walking tours are planned.

Due to the conf. size and plant restrictions, Friday process tours will

consist of five separate bus tours. Registrants will be asked to indicate preferences on the registration form, with seats assigned on a first come, first served basis.

Several tours are theme-based, with consideration given to site proximity for reasonable bus routes. One or two tours will include a non-thematic site selection.

Included in the overall tour selection will be the Phila. Navy Yard's sheet metal, shipfitters, and machine shops; the Freeland Felt Co., mfrs. of horseblankets during the Civil War; Container Corp.'s pulp & box mill; SEPTA's 69th St. terminal, main shop, car house, and motor winding shop, along with 60-year-old Brill Bullet cars; the GE switch-gear plant for high voltage equip.; and Conrail's coal & ore loading piers.

Two spectacular sites have been selected for special events on Friday and Saturday evenings. Friday's event will be at the great Fairmount Waterworks, now undergoing restoration as a restaurant and interpretive center. Saturday's event will be aboard the USS *Olympia*, the 1892 armed cruiser that was Admiral Dewey's flagship at the 1898 Battle of Manila Bay ("You may fire when you are ready, Gridley").

Three identical tours of industrial Phila. on Sunday will round out the conf. RittenhouseTown, site of the nation's first paper mill, is celebrating its 300th anniv., and may be included on the tour. If there is enough interest, two post-conf. tours will be held Monday: the Hagley Museum and Library at the DuPont Powder Works in Wilmington, Del.; and the Moravian Tile Works, Fontheil, and the Mercer Museum in Doylestown, Pa. Both will be day-long tours with lunch included.

Conf. logistical and registration details will be mailed to SIA members in the spring and also will be published in a forthcoming *SIAN*.

LETTERS TO EDITOR

Ironbridge postal celebration

We were very interested to see the coverage in the Summer SIA *Newsletter* about the issue of Industrial Archaeology stamps in Britain.

The Ironbridge Gorge Museum, of which naturally enough the Iron Bridge forms the centrepiece, this year did its own First Day Covers, as well as featuring one of the national launches of the issue actually on the Iron Bridge itself. We had a huge inflatable champagne bottle, out of which issued hundreds of specially printed balloons bearing tags entitling the finder to free admission to the museum. The covers were specially printed in silk by Benham and some of them were signed on the day by the designer of the stamps themselves, Mr. Ronald Maddox, as well as by the director of the museum.

In addition, the museum has now commissioned its own cachet, so that visitors to the museum who post their mail on the Iron Bridge itself in the mail box, will receive at no charge a special hand cachet, which states "Posted on the World's First Cast Iron Bridge."

KATIE FOSTER
Head of Public Relations
The Ironbridge Gorge Museum
Ironbridge, Telford, Shropshire
England TF8 7AW

Reports of Stott retirement exaggerated

I was very honored by the story in the last *SIAN*, as I was overwhelmed by the attention that all my friends in the SIA have shown. However, I must correct an error which the article perpetuates. I am *not* bound for the State Dept. in the immediate future. Nonetheless, it is true that I hope to cast my net a bit wider than I have in the last few years. For the moment, I am completing a twelve-month inventory of IA in Columbia County, N.Y., with a grant from the J.M. Kaplan Fund of N.Y. to the Columbia County Historical Society. What happens at the end of that time is as yet undetermined!

PETER H. STOTT
Craryville, N.Y.

Remembering the Leominster machine shop

Issue Vol. 18, No. 1, brought back many memories with the article on the 1872 Leominster machine shop. In the spring of 1954, with an interest in steam engines just starting to grow, my parents sent me by bus from East Hampton, N.Y., to Leominster to spend spring vacation with my paternal great uncle who I was named after. He had a farm outside of town and also sawed wood.

One day while sawing, a connecting rod on the big gas engine powering the mill burned out. We removed the rod and took it into the Leominster machine shop where it was rebabbitted and machined. While this operation was going on, I made good use of the opportunity to tour the old building with so many goodies.

From a memory now 35 years old, I believe that I was told that the steam engine was built in the shop. I recall that it had a unique valve setup. Upstairs, there was a steam car engine and I believe a small vertical along with many, many other industrial artifacts.

I went through Leominster once more in 1968 on my honeymoon trip but the shop was closed and at that time, I was interested in other things than old iron!

FRANCIS A. ORR
Fidalgo Enterprises,
"In support of recreational engineering."
Anacortes, Wash.

Valentine correction

In the Summer *SIAN*, the news note announcing The Valentine Museum's search for industrial artifacts had an incorrect phone number. The correct number is 804-649-0711.

GREG GALER
Coordinator of Industrial History
The Valentine
1015 E. Clay St., Richmond VA 23219

CALENDAR

Have a meeting, conference, or event of interest to SIA members? Submit announcements to the Editor, SIAN.

1990

Jan. 23-26: 11th Annual Wood Identification Workshop, Univ. of Mass. at Amherst. Includes approaches and methods for ID of wood in historic objects. Limited enrollment. Info.: Div. of Continuing Ed., Rm. 608, Goodell Bldg., U. of M., Amherst MA 01003 (413-545-2484).

Feb. 3: 3rd Annual Conf on New England IA, Plymouth St. College, Plymouth, N.H. Sponsored by Southern & Northern New England Chapters SIA. Info.: Dennis E. Howe, Pres., Northern N.E. Chap. SIA, 22 Union St., Concord NH 03301 (603-225-6649).

Mar. 24: Natl. conf. on textile history, Woonsocket, R.I., sponsored by City of Woonsocket and Blackstone River Valley Natl. Heritage Corridor. Info.: Douglas M. Reynolds, Scholar in Residence, BRVNH, POB 34, Uxbridge MA 01569 (508-278-7322).

May 9-12: Annual Meeting, Vernacular Architecture Forum, Lexington, Ky. Info.: Julie Riesenweber, Ky. Heritage Council, 12th Fl. Capital Plaza Tower, Frankfort KY 40601 (505-564-7005). Info.: Gary Stanton, VAF Papers Chair, Dept. of Hist. Pres., Mary Washington College, Fredericksburg VA 22401-5358.

May 16-19: First national conference on "Cultural Conservation: Reconfiguring the Cultural Mission," sponsored by the American Folklife Center, Library of Congress, Wash. D.C. Info.: Mary Hufford, American Folklife Center, Library of Congress, Wash. DC 20540 (202-707-6590).

MAY 31-JUNE 4: SIA 19TH ANNUAL CONF., PHILA., PA. Info.: Jane Mork Gibson, Oliver Evans Chap. SIA, 32 Rex Ave., Phila. PA 19118 (215-242-4971).*

Aug. 10-12: Conf., "Western Railroads: Then & Now," in Flagstaff, Ariz. Info.: Al Richmond, Center for Colorado Plateau Studies, Northern Ariz. Univ., Box 5613, Flagstaff AZ 86011.

Aug. 18-26: "THE TRAIL OF '98: SIA STUDY TOUR OF YUKON & ALASKA. For brochure & regis. form, write SIA HQ, Rm. 5020

NMAH, Smithsonian Inst., Wash. DC 20560, or phone Chris Andree [SIA] at 519-657-1851.

Sept. [date TBA]: Third Textile History Conf., Museum of American Textile History. Info.: Thomas W. Leavitt, Director, MATH, 800 Massachusetts Ave., North Andover MA 01845.

Sept. 2-9: 7th Intl. Conf. on the Conservation of the Industrial Heritage, Brussels, Belgium. Info.: Stephen Victor, TICCIH U.S. Rep., 166 E. Rock Rd., New Haven CT 06511 (203-789-8223) or Guido Vanderhulst, TICCIH Belgium, rue Ransfort 27, B-1080 Brussels, Belgium.

Oct. 18-20: 12th Annual N. American Labor History Conf., Wayne State Univ., Detroit. Paper proposals due May 1 to Stanley D. Solvick, Program Chair, Dept. of Hist., WSU, Detroit MI 48202 (313-577-6145 or -2525).

Oct. 18-21: Annual Meeting, Society for the History of Technology, Cleveland, Ohio. Proposals due April 1 to Lindy Biggs, Dept. of Hist., Auburn Univ., Auburn AL 36849 (205-844-6645 or Bitnet electronic mail HIST@AUDUCVAX).

**Find details on this event elsewhere in this issue.*

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 \$25; couple, \$30; institutions \$30; contributing, \$50; sustaining, \$100; student, \$20. Send check payable to SIA to Treasurer, Room 5020, National Museum of American History, Smithsonian Institution, Washington, D.C. 20560; all business correspondence should be sent to that office.

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Submission deadlines: Feb. 1 (Spring), May 1 (Summer), Aug. 1 (Fall), and Nov. 1 (Winter).

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TO CONTACT THE EDITOR — WRITE: Robert M. Frame III, Editor, *SIA Newsletter*, PO. Box 65158, St. Paul, MN 55165-0158.

USE ELECTRONIC MAIL: If you are a computer user and subscribe to MCI Mail, you can send messages directly to the *SIAN* Editor. Address your MCI Mail to Robert M. Frame III, MCI ID 258-5345.

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

Room 5020 National Museum of American History

Smithsonian Institution Washington, DC 20560

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