

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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DELAWARE AQUEDUCT SOLD—BUT IT'S OK!

Roebling's Delaware Aqueduct, at times quite reasonably referred to as America's Iron Bridge (SIAN 1:5), which had been for sale for a number of years by its previous owner, last January was purchased by Albert L Kraft of Hawley, PA, who, happily, is fully appreciative of the venerable span's extraordinary historical importance. Fortunately the tolls provide sufficient return for adequate maintenance. Kraft already has replaced much of the timberwork of the deck; this fall

will remove rust and repaint the main cables, suspenders and other ironwork; and has long range plans to rework the approaches, repaint the pier and abutment masonry, and construct some type of ice protectors for the upriver masonry faces. Beyond this, he has taken steps to draw public attention to the structure and provide attractive visitor facilities, including a gift shop. *Recall that the ideal use for a historic industrial structure is continued use.*

READING TERMINAL RALLIES

The prognosis for the Reading's Great Train Shed in Philadelphia, whose National Registry and subsequent apparent doom was noted in SIAN 1:5 & 2:2, seems to have brightened, but just barely. The Soc of Architectural Historians' Philadelphia Chapter's Preservation Committee's Chairman, George E Thomas, has mounted a vigorous campaign to preserve at least the huge train shed (1891-93), the last remaining great 19thC American arched track enclosure, and the oldest surviving long-span roof in the world. Proposals have been made for adaptation of the structure to a shopping mall, a bus terminal, or some other commercial use compatible with the Market Street East project that, with new subway facilities beneath the site, threatens it. The most coherent of the re-use schemes have been advanced by U of PA architectural student Marianna Thomas in a thesis study.

The feasibility of preservation and re-use is being considered by the President's Advisory Council on Historic Preservation, involved as the project to replace the terminal is federally financed (HUD) and it is on the Register. Predictably, the city's Redevelopment Authority is attempting to avoid a legal confrontation over demolition by a ploy that recently has gained some popularity among those honorable folks of the political community: Denational registration. Look guys, it won't work. Information on the situation: GET, 3920 Pine St, Phila 19104.

GOOD NEWS FROM BALTIMORE

In a move bound to astonish anyone conscious of the industry's generally slack fiscal position during recent decades, the C&O/B&O (combined) RR has officially announced a \$1-million renovation of the B&O Museum in Baltimore, which contains the finest collection of historical locomotives and rolling stock in the US. It is housed in a structure that is of nearly as great importance, the huge circular (well, 22-sided polygonal) car shop of 1884 at the B&O's Mt Clair shops, which has been growing tattier by the year. The money will be used to repair the shop, adapt another (less spectacular) shop building, demolish an adjacent nondescript grain elevator, and refurbish the exhibits.

APPOMATTOX IRON WORKS

Some of our most interesting IA has been coming to light recently in the South, an area that many historians of technology and industry have been too ready to write off as barren territory. But then too, southern preservationists have been as guilty as any of the house and battlefield syndrome. But it's changing. Recently Historic Petersburg (VA) Founda-



tion, Inc, through the alertness of one of its members, noticed that the Appomattox Iron Works there had been sold and in an uncommonly enlightened move, the group, with a \$10,000 loan, purchased the site from the new owner, who actually had begun demolition. All this, mind you, on the strength of nothing more than an intuitive awareness that the firm had been in business for a century, that it had been of some importance to the city's economy, and that the structures and contents seemed to have historical interest. No certainty of the latter, and certainly no clear notion of what was to be done with their property or where additional funding was to come from. *That's* the sort of boldness that can make industrial preservation work.

AIW is, in fact, an exceptional site in its variety and integrity. After the Civil War the firm began as a foundry and machine works, by the time of its removal to the present site c1900 producing sawmill and misc agricultural machinery, and general castings. The last regular product was a line of peanut shellers, not built since WW II. Also c1900 a mill supply busi-

ness was added. Surviving are much of the foundry, the wood and pattern shop, the machine shop, and several smaller manufacturing areas, plus a vast pattern collection and the entire supply store; the whole, in its fixtures, machinery and atmosphere seemingly frozen c1910. HPFI's plans for the site are not firm, but some sort of interpretive public exhibition is proposed, wisely with minimal alteration, the enterprise to be related to other historic sites in the area. Assistance and advice is sought: HPFI, Box 928, Petersburg, VA 23803.

SIA SLIDEFILM UNDERWAY

The steady efforts of Chester Liebs (SIA VP) and his Preservation Committee have paid off: on 1 Aug the SIA began production of a 20-minute slidefilm illustrating the importance of industrial structures as historic resources. To be completed in Feb, the project is being funded by grants from the Natl Endowment for the Arts (\$9,000) Washington, and Educational Facilities Laboratories of NYC (\$6,000). Louise McAllister Merritt prepared the proposal.

John Karol of Orford, NH, a well known maker of environmental films, has been selected by the SIA Board to produce the slidefilm, using his method of synchronizing still images of high visual impact with a narrative derived from on-site interviews. The slidefilm can then be converted to videotape, motion picture film, or filmstrips for wide distribution. As an example of the effectiveness of this technique, Karol's slidefilm, "... so goes Vermont," produced for the VT Natural Resources Council, was instrumental in arousing public support for the state's land use planning legislation.

The SIA slidefilm is meant to encourage the preservation of significant industrial sites and structures by developing an awareness of industry's historic role in shaping our environment; engendering a respect for remains of the industrial past by emphasizing their importance in our heritage; identifying obsolete industrial space as a useful resource; emphasizing the role of industrial structures in preserving community identity; and explaining the economics that make preservation and reuse of historical industrial structures feasible. It is directed at the general public and groups involved in making decisions about the fate of IA resources.

It is not too late for suggestions of specific IA projects that might be appropriate for inclusion in the slidefilm. To the project's director: Chester H Liebs, VT Divn of Historic Sites, Pavilion Bldg, Montpelier, VT 05602.

U. S. ARCHEOLOGICAL SALVAGE BILL

Legislation now before Congress would aid in the preservation and salvage of archeological and historical data threatened by Federal construction projects. Existing laws cover some reservoir and highway construction. The new act is an amendment to the Reservoir Salvage Act of 1960 under which the Natl Park Svc (through the Secy of the Interior) is notified of new dam construction and directed to survey the area and preserve any significant data found.

The new bill: the Moss-Bennett or Archeological Salvage bill, would broaden the law to include all Fedl, federally assisted, or federally authorized construction projects that alter the terrain. It would authorize surveys upon notification by any Fedl or State agency or responsible private organization or individual. The construction agency would be authorized to expend up to 1% of the project's funds for survey & salvage. The law would benefit IA through discovery of new sites, and recording when preservation might not be possible or warranted.

Identical bills were introduced in the Senate (SB 514) and House (HR 296) in Jany and passed unanimously by the Senate in May. Hearings were held by the House Subcommittee on Natl Parks & Recreation (Committee on Interior Affairs) on 30 & 31 July. **A letter to your Representative will help bring the bill to a vote in the House.** Tyler Bastian, MD *Geological Survey.*

FICCIM

The First Intl Congress on the Conservation of Industrial Monuments occurred, 29 May-5 June, at Attingham Park near Shrewsbury, England, with nearly 70 delegates from the UK, Canada (4), US (5), E & W Germany, Sweden and Holland attending.

The Congress was organized by Neil Cossons, director and prime mover of the Ironbridge Gorge Museum Trust which has custody of the three-mile strip along the River Severn, Shropshire, that takes in the Coalbrookdale iron-making sites; the town of Ironbridge and the famed Coalbrookdale Iron Bridge itself; and a group of associated canals, mines, iron-working sites, bridges, tunnels, potteries, etc. It is unquestionably the one area in the world richest in significant survivals of the Industrial Revolution's beginnings.

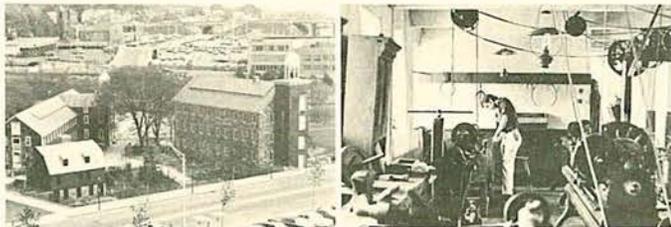
The Congress was devoted about half and half, alternately, to papers by the delegates and bus trips to industrial sites within an 80-mile radius. The papers varied from general surveys of the state of industrial preservation in an entire country to detailed descriptions of a number of individual outdoor museum projects concerned primarily with IA. Several papers dealt with the inventorying and the graphic recording of sites and structures. As might be expected, there is some disparity in the state of industrial preservation among the nations represented. England, Wales and the US seem to be on about a par, with some very good work being done both by governmental and other official agencies and private efforts; while in Scotland, Canada and Sweden, for example, the awareness that such preservation is important appears just to be awakening, with all 3 countries now embarking on extensive inventory projects as a prelude to systematic recording and preservation programs. In all countries represented there is a good bit of preservation—even of some surprisingly large objects—in both conventional technical museums and outdoor "village" IA museums, with activity continuing energetically in this line.

Several pervasive themes emerged, as certain points were repeatedly put forth. Principally: although things are looking up in this area in nearly every country represented, there still is a long way to go in educating governments at all levels, owners of sites and structures, and the general public, whose voice wields considerable influence with the former two in the advocacy of industrial preservation and re-use. Also consistently stressed was the need for greater emphasis—not to say initial awareness—by preservationists of all types on social and human aspects. The proponents of this philosophy rightfully believed that in focussing preservation planning and campaigning upon the customary industrial buildings and sites, we have paid too little attention to the housing, churches, stores and places of amusement of the workers (and even of the owners and managers). Not surprisingly, this feeling was most strongly voiced by delegates from Sweden and East Germany.

At the Congress' conclusion, it was felt beyond any question that the gathering had been a great success; informative and of enormous usefulness. *Proceedings* are to be published. A *SICCIM* was proposed, in 1975, probably in either Sweden or West Germany. The US might be a logical location for a *TICCIM*, in 1977.

EARLY TRAIN SHED FALLS

The passenger shed of Chattanooga Union Depot, the city's last pre-Civil War building, fell to the wrecker's ball early in May, leaving only the 1881 addition on 9th St. The passenger shed, 1857, was 304 ft long and arched 100 ft over 6 tracks. By and large, Chattanooga has been sadly indifferent to its historical heritage, industrial and otherwise. The city has no historical museum and the entire old part of town has been leveled. Little effort seems to have been made to explore adaptive uses for Union Depot although the preservation of the Southern's Terminal Station as *The Chattanooga Choo Choo* (SIAN 1:5) is commendable, despite its branding with a cutesie name.



WILKINSON MILL OPENS

The Old Slater Mill Assn has opened the Oziel Wilkinson Mill (SIAN 2:1), the third of the 3 major buildings occupying the 5-acre Slater Mill Historic Site in Pawtucket, RI. (Besides the Slater Mill itself, opened in 1955, there is also the Sylvanus Brown House (1758), home of a carpenter and patternmaker who built machinery for many of the area's mills, including Samuel Slater's. The Brown House has been moved from its original site and restored with complete fidelity, based on an 1824 inventory of its contents.) Acquired in 1968, the Wilkinson Mill (1810) has been undergoing restoration for 5 years, funded by a HUD grant and private money. Surviving evidence of the original interior layout was used to approximate its early appearance. Components of a machine shop exhibit were gathered from such varied points as the Crown & Eagle Mill in N Uxbridge, MA (SIAN 2:3) and the Pontiac Print Works in Warwick, RI. Exhibits planned at the site include one on Samuel Slater himself, others on mill architecture and water power, and a blacksmith's shop.

THE WORK OF IA

HAER EMERGENCY RECORDING SURVEYS, SUMMER '73

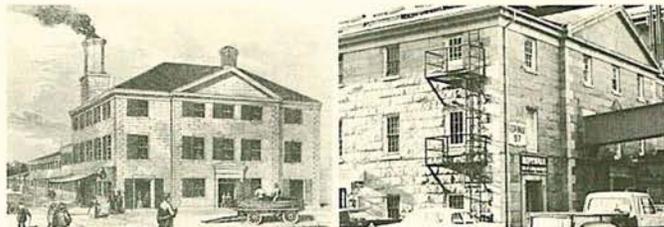
This summer the HAER Washington Office undertook several emergency recording surveys in addition to its regular program of state and area surveys (SIAN 2:2). Recorded were the Gruber Wagon Works (1882) nr Reading, PA; the Gladden-Milks Vertical Windmill (1890), Napoli, NY (SIAN 1:6); and a Northeastern RR warehouse (1881) in Charleston. The Gruber site is scheduled for inundation from the Corps of Engineers' Blue Marsh Dam. It is worth noting that the survey was initiated by the Corps in compliance with the President's Exec Order 11593—Protection & Enhancement of the Cultural Environment—and that the Corps is seriously considering re-erection of the Works in a protected area.

The other 2 structures are endangered by deterioration and demolition respectively. Recording was initiated by the NY State Division for Hist Pres and the Hist Charleston Fndn. All 3 projects were made possible by contributions to HAER by the cooperating agencies. The field notes for the latter 2 will be filed until time and manpower permit drafting finished drawings; the Gruber project will be completed now.

The HAER will be happy to consider emergency recording situations, preferably during the summer. Please send full information and photographs of the endangered structure to: The Historic American Engineering Record, National Park Service, Washington, DC 20240.

ROPEWALK RECORDED

A start toward documenting the industrial, technological, and architectural history of the Boston Naval Shipyard, Charlestown, has been made by 3 students at Harvard's Graduate School of design: Helen W Davis, Edward M Hatch, and David G Wright (SIA), under Prof Edward F Sekler, head of the architectural history program. One of the original 8 established by Congress, the BNS includes a complex of late-1830s buildings designed by Alexander Parris for the manufacture of rope. This ropewalk complex was one of the first in the country to be fully steam powered and heated. The ropewalk itself, 1360 ft long, supplied all rope used by the entire US Navy until WW II. It was decommissioned in 1971. The students made 9 measured drawings of the ropewalk and



Ropewalk "Head House," c1838 and 1973. Engraving courtesy Society for the Preservation of New England Antiquities.

headhouse, 4 site plans showing the yard's growth, and photocopied the original drawings and plans, including the signed Parris presentation drawings. The latter, long thought lost, were unearthed by the researchers with the aid of National Archives staff. With the deactivation of the entire BNS impending, it is hoped that this project will be helpful in developing viable alternative use plans.

"City Edges" is the name given the initial phase of a long-range program funded by the Natl Endowment for the Arts (SIA) for studies of "dividing lines—both real and psychological—between urban areas or activities." These include water fronts, highways, and RRs. Two of this year's 37 grants are of special IA interest: the City of Reading, PA, will evaluate adaptive uses for the Reading RR's obsolete and deteriorating locomotive repair facilities and car shops, located on a 290-acre tract in a natural hollow (\$21,045); and the Hudson Mohawk Industrial Gateway, Troy, NY, will seek alternatives to demolition of old water front buildings located around the confluence of the Hudson and Mohawk rivers (\$40,000). Information on the City Edges program: Robert H McNulty, Asst Dir, Architecture + Environmental Arts Prog, NEA, Washington, DC 20505.

PROJECTS, SITES & STRUCTURES



Masonry skew bridge spanning Canal at Lock 12 carried the parallel railroad that succeeded it. Photo: Thomas Pool.

Connecticut's Farmington Canal (1822-46) (SIAN 1:6) while short-lived is considered important as the state's only significant, extensive scheme during the country's great canal-building period. It was envisioned as a cheap transportation system for the agricultural towns not served by the Conn River and effected commercial development along its route. This spring the Farmington Canal Corridor Assn formed to preserve the canal remains for use as recreational and conservation areas. Lock 12 at Cheshire, today the best of the canal sites, has been placed on the Natl Register. The lock, formerly on private property, is currently for sale. The village of Cheshire holds a nonreturnable option on the property (expires 30 Sept) and the FCCA has applied to the Fedl Bureau of Outdoor Recreation and the Conn Hist Commn for assistance in its acquisition. *Herbert C Darbee, Conn Hist Commn*



Photo: R J Corby

The Canadian Engineering Heritage Record, whose principal charge is to identify and inventory Canadian IA (SIAN 1:6), has effectively preserved an **early heavy timber crane**, c1825. Notified by Kingston's Harbormaster of its existence in a shipyard building under demolition, where it had been used in handling large sails, CEHR in turn advised the government's Historic Sites Service, which was unable to use it, and finally the Natl Museum of Science & Technology whose Curator of Industrial Technology, R J Corby (SIA), offered it a home in the stored collections pending location of a suitable exhibit spot. Before dismantling, it was measured and drawn by CEHR. *Paul Stumes, CEHR.*

The NY State Office of Parks & Recreation and Dept of Transportation are conducting a study to identify lands adjacent to the **State Barge Canal** suitable for adaptation to recreational use. The canal system passes through 21 counties with a combined population of more than 4.27 million. Although there are nearly 2000 commercial and public recreation facilities already in operation, overcrowding is becoming apparent. As the first step in the joint DOT-OPR program, 3 canal trailways and 6 parks located at lock-sites (which are especially popular) were opened this summer. The parks are at Erie locks 9 (Rotterdam Junction), 20 (Whitesboro), 23 (Brewerton), 30 (Macedon), and 32 (Pittsford); and at Champlain Lock 4 (Stillwater). A 5-year development program calls for establishing "a unified, interconnecting park and recreation system" along the entire 524-mile Barge Canal. *The Conservationist, June-July.*



Photo: Louise McAllister Merritt

One more engineering relic about to be lost is the **Delaware River Bridge (c1880) in Dingmans Ferry, PA.** The wrought-iron bridge consists of 3 subdivided Pratt-type through trusses. The use of patent "Phoenix" columns for main compression members identifies the structure as a product of the Phoenix Bridge Co of Phoenixville, PA. The spans originally were part of a RR bridge crossing the Susquehanna at Milton, PA, moved to this site in 1900, and operated since as a private highway toll bridge. The site is scheduled to disappear beneath the waters of the Delaware, backed up by the Corps of Engineers' Tocks Island Dam, whose reservoir will inundate the valley as far north as Milford, destroying several villages and some interesting IA. This will be the only bridge affected, for happily, John A. Roebling's Delaware Aqueduct at Lackawaxen (page 1) is far enough north to be out of the reservoir area. *Louise McAllister Merritt, Columbia University*

The Hydro-Electric Power House, c1897, of the (F W) Vanderbilt Mansion Natl Historical Site, Hyde Park, NY, is being programmed for preservation by the Park Service. The 1-story

cobblestone building in the design of a "garden cottage" includes a generator and a battery room, and a shop. The plant was designed and erected by W T Hiscox & Co, NYC, engineers. Until the late 30s, electricity (DC) for the estate was generated by the plant, powered by a 22' turbine under 25' head. An auxiliary generator powered by Fairbanks Morse gas/gasoline engine was used during low water. A Gould triplex piston pump in the power house supplied up to 30,000 gals/day of non-potable water for the estate. Although the structure is in deteriorated condition, most of the equipment is intact. *Hugh C Miller, NPS.*

ADAPTIVE USE



Photo: Joseph C Farrington

CIGARS. An interesting project is under way at the old V M Ybor Cigar Factory complex in Tampa. The entire complex, occupying 1 city block, will be renovated by Trend Publications of Florida and opened as "Ybor Square," a shopping mall with accommodations for apartments and offices above the shops. Conversion will begin with the stemmery (1902), the largest of the 3 major buildings. Trend will occupy the entire 3d floor. Stage 2 will entail renovation of the warehouse and the north wing of the factory, and stage 3 the factory itself (1886) and its south wing, the latter to be outfitted as a cigar museum replete with artisans plying the old trade of cigar rolling. Restoration of the complex (on the Natl Register) will aim at preserving a maximum of site integrity, with no alterations to the bare brick walls, heart-of-pine columns, or original wooden floors.

FEATHERS. In San Francisco a one-time feather "factory" has been rehabilitated by the city's Knorr-Elliott, architects and planners. When built in 1919 the factory at 950 Battery St was a 1-story + basement feather cleaning plant; in 1932 2 floors and a loft were added. It has stood vacant for decades. K-E, winner of the 1972 San Francisco Academy of Arts Environmental Design Award, has carefully planned an interior that retains the original fabric and sense of space of the factory. The firm itself uses the top level for their offices; the ground floor houses a hardware store; and the 2d & 3d floors are leased office space and a furniture showroom. *Illus article: Architectural Record August 1973.*

THE WEST POINT FOUNDRY SITE (1817-1911), Cold Spring, NY, has been placed on the Natl Register and plans are underway to develop it as part of a hotel (125-room Hilton)-marina complex by the Deuterium Corp (heavy water prodn) through their wholly-owned subsidiary, "Old Foundry Corp" DC officials propose conversion of the Foundry ruins into a park, restoration of the Victorian office for use as a museum and tourist center, and in time, partial reconstruction of the Foundry and its operation to manufacture reproductions of its original products. (*Some of its products, we must suppose: WPF was a leading mfg of large iron and brass castings, heavy machinery, and ordnance, and at mid-19thC was considered the largest establishment of its kind in America.*) The new marina will utilize the site of the former RR pier, built for deep-water shipping. According to DC's press release, the property is being developed "to increase the worth of Deuterium Corp through capital appreciation of its real estate and diversification into fields of general public use."

FERRIES. The *Newport*, ex-Jamestown-Newport, RI vessel, has been converted to a floating youth center in Pawtucket, RI, by a RI School of Design (SIA) student design team under Prof Zane Anderson, financed by HUD through the local Model Cities agency . . . and the South Street Seaport Museum, NYC (SIAN Suppl 2) is seriously considering re-instituting the **Fulton St Ferry**, that operated until 1926 between Manhattan and Brooklyn, in the very shadow of Brooklyn Bridge, as a means of relieving some of the commuter congestion on bridge and subway, of making itself some revenue, and of adding a bit of live marine flavor to its operation. Passenger service only; with a 2nd-hand or new vessel.

LIBERTY SHIPS. If not quite unsung, at least never revered, the breed is rapidly disappearing. Of the 2700 built to carry goods during WW II, something over 100 survive: about 40 in foreign cargo service; 72 mothballed in the so-called reserve fleet and due for scrapping; and the John W. Brown, which shortly will be replaced as a floating school in NYC and returned to the Govt. There are two proposals, considered serious, to obtain her (him?) for use as a floating marine museum. *NY Times*, 5 June.

MISC NOTES

The Historicals. The Society for Historical Archaeology's 7th Annual Conference will be held in Berkeley, 10-12 Jan 1974. Program Chrmn Paul J F Schumacher (SIA) cordially invites suggestions for reports, papers, symposia, etc. Titles by 1 Oct; abstracts by 1 Nov. 200 Pinehill Rd, Hillsborough, CA 94010.

As the Bessemer gave way to the open hearth, so the open hearth gives way to the basic-oxygen furnace. Bethlehem Steel Co plans to modernize all facets of its operations within the next 12 years, priority having been assigned to eliminating the aging open hearth furnaces at its Johnstown, PA, plant. Although still serviceable, they rarely are fired up and probably will be closed down permanently by 1977. About 26% of BSC output now is open hearth, but virtually all of this from units less than 20 years old at its Sparrows Point, MD, plant.

The Bell Monopoly Myth. The Bryant Pond (Oxford Co, Maine) Telephone Co, claiming to be one of the last two independent magneto or ring-down companies in the state (and likely New England) is being menaced by a single disgruntled subscriber who is clamoring to the Public Service Commission about poor service. However petitions are abroad in the village and surrounding town, sponsored by the c250 other subscribers, maintaining that not only is it perfectly fine, but actually is *superior* to the rather more widespread service rendered by Brand "B" as a result of the personal qualities provided by an operator who is local, right there at the manual board in the prop's living room exchange, and who has a good general idea of where everybody is at any given moment.

IA Films. As part of its work, the Smithsonian Institution-National Science Foundation Bicentennial Project on American Science & Technology is gathering information on audio-visual sources, compiling a list of films and film sources related to American IA. The help of SIA members is solicited. Included with this issue is a form for listing films which you are earnestly requested to return with pertinent data.

Research inquiry—Member and leading molinologist J Kenneth Major, as background for a major work on animal power, seeks information on all *extant* horse engines, treadmills, wheels, sweeps, powers, and other forms, in use or not, intentionally preserved or not. No 2 Eldon Rd, Reading RG1 4DH, England.

SIA NOTES

The Board has resolved that all literature, reprints and other publications officially distributed at SIA conferences, tours and other events, shall bear the Society's imprint, unless the Board votes for exception.

Proposals for Program, Annual Meeting, April 27-28, 1974 General recommendations are invited as are submissions of abstracts of papers to be presented at the next annual meeting. The presentations must be limited to 30 minutes. Abstracts should be titled, approximately 150 words long and be accompanied by a brief description of the author's interest in the subject. Due 15 Dec 1973, c/o the editor.

Being editor means (once in a while) having to say you're sorry, when an issue has itself turned into one by suddenly turning out to be *months* late. It won't happen again, truly. Busy summer, masses of heat, you know how it is gang. The only salvation here, without doubt, has been some heavy editorial jointship, the bulk of the copy having been generated by Dianne Newell Macdougall, Washington, and Robert C Post, Natl Museum of History & Technology. Richard N Candee, Old Sturbridge Village, did the Troy Meeting account in the Supplement. Moreover, there has been a flood of splendid material from the faithful. If you don't see it here, look for it in the Sept number, in living color, on the stands or through the mails, mid-February, latest.

PUBLICATIONS OF INTEREST

Richard S Allen (SIA), "The Prof. Rang a Bell," in *The Conser-vationist*, June-July, pp 34-6. Brief note of Joseph Henry's early electrical work, incl magnetic ore separation.

Samuel Bachelder, *Intro & Early Progress of the Cotton Mfgr in the US*. 1863. Reprint: Clifton, NJ: A M Kelly, 1972. 108 pp. \$8.50. A classic.

Brian Bracegirdle (ed), *The Archaeology of the Industrial Revolution*. Heinemann Educational Books, 48 Charles St, London W1X 8AH. 208 pp, 48 in color. \$17.50 pp. Contributions by Tann, Wailes, Rolt, Cossons and other eminent.

Cynthia Gaskell Brown (ed), *The IA of Plymouth & Millbrook, Cornwall*. WEA, Martins Gate, Bretonside, Plymouth, Engl. 52 pp. \$1 pp.

Stephen R Burgess, "A Station Built by Shovels: North Easton, Mass," in *RR Station Hist Soc Bulletin*, Mar-April, pp 17-21. (cf SIAN 1:4 p5 & 2:2 p4)

The Cable Railway Co's System of Traction Railways for Cities & Towns. San Francisco, c1881. Reprint by Public Service Office of the Mayor (SF) for the Centennial of the Cable Car, 1873-1973, of the company's original prospectus. Fine record of history, rationale, costs & technology; good illus of cars & machinery; profiles of lines.

Michael R Farrell, *Who Made All Our Streetcars Go?* Baltimore NRHS Publs, 2107 N Charles St, Balto, MD 21218. 320 pp, 270 illus, \$16. Those who made them go initially in 1859 and finally in 1963, all in Baltimore.

Bernard S Finn, *Submarine Telegraphy, The Grand Victorian Technology*. The Science Museum, London SW7. 48 pp, paper, \$1 pp. Good illus acct of the broad development, heavily based on Science Museum's collections.

Geoffrey Hindley, *A History of Roads*. Secaucus, NJ: Citadel. 1972. \$8.

David J Jeremy, "British Textile Technology Transmission to the US: The Philadelphia Region Experience, 1770-1820," in *Business History Review*, Spring 1973, pp 24-52. The title says it all.

James Lee, *The Morris Canal—A Photographic History*. Canal Press Inc, 39 W Springettsbury Ave, York, PA 17403. \$5.50 pp; \$6.50 after 1 Dec. Over 150 photos of the canal in operation, boating east from the Delaware to the Jersey City basin, featuring the remarkable series of inclines and the articulated cradles and boats. Short history, map, profile, bibl. (see SIAN 2:1 p2). List of CPI's other reprints & original publs avail. Of note is 1901 report on the *Canals of PA*, illus, \$3.50, incl extensive PA canals bibl by Harry Rinker (SIA).

Edward A Lewis, *New England Country Depots*. The Baggage Car, Box 81, Arcade, NY 14009. 160 pp, paper. A nicely presented and organized collection of photos and brief descriptions of about 300 NECDs, of special interest as all are shown when in active use.

M J T Lewis, "Industrial Archaeology," chap in *The Fontana Economic History of Europe*, vol III (Industrial Revolution) ed by Carlo M Cipolla. London: Collins/Fontana Books, \$4.95, paper.

Robert R Macdonald (SIA), "Eli Whitney & the Development of American Technology," in *Discovery* (Peabody Museum), Spring 1973, pp 83-92, illus. Efforts to document and preserve the Whitney site in New Haven, based heavily on IA (SIAN 2:1 p2).

Walter Minchinton (SIA), *Industrial Archaeology in Devon* (rev). Dartington Amenity Research Trust, Exeter, Engl. 36 pp, paper, \$1.50 (Intl MOs requested). Excellently organized and illus model acct of the rich IA of the county.

Ferdinand L Molz, "A History of the Christiana [PA] Machine Co," in *Jnl of the Lancaster Co Hist Soc*, vol 76, #4, 1972, pp 173-238. Thorough acct of a rural firm that produced small water turbines & mill work.

Jacob H Morrison, *Supplement to Historic Preservation Law*. The author: 722 Ursuline St, New Orleans, LA 70116. 96 pp. \$1.75 pp. Digest of decisions and fedl & state statutes since 1965.

The Next Station Will Be . . . being a series of soft cover pictorial albums, publ by the Railroadians of America, Inc, 761 W Inman Ave, Rahway, NJ 07065, of large photos of Erie and associated-line depots in 1910, based on a recently discovered collection. 36 or 48 pp ea; \$3.50 pp (+15c in NJ). No 1 avail: *NY Susquehanna & Western*; depots in route order: NYC ferry terminal to Middletown, NY.

Glen Porter & Harold C Livesay, *Merchants & Manufacturers—Studies in the Changing Structure of 19thC Marketing*. Baltimore: Johns Hopkins Press, 1971. \$11.50. Good analysis based largely on heavy industries & textiles.

Sacramento Trust for Historic Preservation, (1009 7th St, S, CA 95814), *Old Sacramento State Historical Park; the California State Railroad Museum: Recommendations for Planning & Devel*. 1972. 197 pp. Unusually complete and effective document on justification for and expected needs of a local RR museum, taking also a broad philosophical view of the entire RR museum question.

Philip Riden, *The Butterfly Co 1790-1830*. The author: 18 Mill Lane, Wingerworth, Chesterfield, Derbyshire, Engl. \$10 pp. One of the largest British coal & iron firms of the Ind Revolution, with interests extending as far as Calcutta.

G R Stevens, *History of the Canadian National Rys*. NY: Macmillan. 538 pp, illus. \$15.

Waldo Nielsen, *Right-of-Way— a Guide to Abandoned Railroads in the U.S*. Right-of-Way, Box 243 Bend, OR 97701. 124 pp, paper. \$4.95 pp. Full-page map of each state showing RRs abandoned, with list giving mileage and approx period of abandonment. (total: 21,148 miles lost since 1945) "For joggers, hikers, collectors of insulators (!), and pokers around old stations, tunnels, etc.

Robin M Reeve, *The Industrial Revolution, 1750-1850*. Univ of London Press, 1971. 271 pp, illus. US: Rowman & Littlefield, Totowa, NJ \$3.25 paper.

Old Mill News, July. (Soc for the Preservation of Old Mills: SIAN 2:1 p4) An issue of special interest: report on replication of an 18thC-type post windmill in MD; acct of a rare wind powered tool works; notes on the 3rd Symposium of the Intl Molinological Soc in the Netherlands last May; etc.

More on the Bechers (SIAN 1:3) Bernhard & Hilla Becher, "Misc: Wasser Türme (Water Towers)," & "Misc: Pithead Archaeology," in *Architectural Review* (Lond), Mar 1967, pp 227-30 & Feb 1968, pp 155-57.

Martha & Murray Zimiles (SIA), *Early American Mills*. Clarkson N Potter, NY, 1973. 290 pp, illus, maps, index, bibl, \$15. An "aesthetically" selected survey of industrial buildings of north-eastern US, this large picture book is marred throughout by failure. While the idea of state maps of major sites and the plea for preservation through adaptive use are commendable, the text is badly structured, riddled with factual and conceptual errors, and illustrated by extremely poor and badly printed photographs. Nearly a third is devoted to saw and grist mills (the iron industry is included as a small "domestic" industry!), a third to textile factories, and less than 20 pages to all other "Miscellaneous Industries." While we clearly need a book of this sort designed for a wide popular audience, *Early American Mills* cannot even be recommended as a partially successful coffee-table book. *Richard N Candee, Old Sturbridge Village*

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Second Thoughts on Arno Reprints

The Arno Press reprint series, *Technology & Society*, was favorably reviewed in SIAN 2:3, AP commended for initiating the series and for the titles selected. Upon closer examination at least 2 of the reprints are subject to serious question: Frederick William Salem, *Beer, its History and its Economic Value as a National Beverage*, Hartford, 1880 (reprint—\$14); and Stanley Wade Baron, *Brewed in America: A History of Beer and Ale in the US*, Boston, 1962 (reprint—\$21). Since there are a multitude of brewery manuals that deserve reprinting (most notably, *100 Years of Brewing*, publ by the *Western Brewer*, 1903), why did the editor select publications which shed no light on brewing technology?

Salem's book, despite its title and its AP catalog description as "one of the first books to seriously explore the significance of the enormous popularity of beer in America in terms of economic and social history . . . with a description of changing American brewing processes" does not deal with technology, or even economics in other than a figurative way. It is, in fact, a temperance manual; one common for the period and identifiable as late 19thC because its argumentation relies on social statistics rather than religious philosophy. The methodology is not skillfully applied, hence the curious chapter comparing levels of income, education, crime, etc, in Maine (dry) and Bavaria (heavy beer drinking), concludes the former to be backward and the latter progressive in every way. It is an interesting illustration of the popular belief, which has never really died, that beer is a healthful, moderate (temperance) beverage and this book, reminding us that temperance sentiment did not call for abstention, is helpful in understanding why breweries and brewing technology flourished in the 19thC. For that reason the book has merit but does not live up to Arno publicity and should not be included in the series.

Baron's book, although described by Arno as "a scholarly history of an aspect of American technology and social custom neglected in most social histories . . ." is in fact marked by poor organization, inappropriate illustns and neglects the brewing process. One finds a chapter on a brewer, on a brewery, on a brewing center; all unrelated, all without rationale. A mere 10 yrs old, it does not even qualify as quaint.

Given their contents, why were these 2 books selected for the series? Did the catalog writer read them? Why no editorial introduction (as with the Noyes Press reprints, SIAN 1:6) providing a context and reasons for selection? Why not a quality of reproduction (paper, print & illustns) to match the premium prices? The market for reprints of this type is virtually guaranteed by libraries and archives alone. Arno and its T & S editor might provide a higher and standard for its customers. *Dianne Newell Macdougall, Washington*.