

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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Left. Overall view of lower-race section, Grant Locomotive Works yard.

Right. Archeological observer Budd Wilson cleaning section of Morris Canal barge found during demolition of DL&WRR Station in path of highway construction. Remains of canal wall are at the left (6-ft. scale).



PATERSONIAN ARCHEOLOGY

Paterson, NJ's historic industrial district (SIAN 1:5, 2:1, Suppls 2 & 3) is the scene of a salvage archeological project sponsored by the Great Falls Development Corp, which is receiving financial support from the state and federal depts of transportation. The work began with 16 weeks of excavation, which ended 1 Nov, to be followed by two years of artifact analysis, historical research, oral history, and compilation of a comprehensive salvage report.

The work to date has attempted to rescue information and artifacts from the path of NJ Route 20, in its original plan to have destroyed half of the district's industrial structures. GFDC has been able to persuade the highway planners to consider the historical merit of the area before further contracts are let. The present project is salvaging material from the path of a large (56" dia) storm drain being laid through the district to relieve possible flooding due to previous highway construction. Here, partial success can be reported, as the NJ DOT has agreed to review alternate tunnel design possibilities that would avoid damaging historical material. Though no final decision has been made, GFDC is hopeful that the road builders have realized the value of what has been unearthed and will move to save the site from destruction.

The finds that have led to this thoughtful revision of plans are in a deeply stratified site that chronicles American industrial development from the 1790s to the present. A long, long-covered tail race, serving a 1000' block of mills on Market St, was found intact. It had been, we think, roofed over with brownstone blocks and brick vaulting in the mid-19thC, allowing locomotive works to be built over it. This "lower raceway" has been entered and four cross channels that discharged into it from the middle race have been located. Each has evidence of a wheel or turbine pit, although none contain original equipment.

Remains of early 19thC mills also have been exhumed. Built over these earlier walls are the parallel bays of a locomotive erecting shop, with a double row of brownstone footings for interior columns. A layer of coal ash was found over the bays, which I believe was used to level off the building's ground floor. Above this remnants of a wooden floor were

found, revealing, probably, an adaptation of the erecting shop building for a textile mill. For the past 70 or 80 years the mill was closely identified with the textile industry, especially silk, for which Paterson was famous.

Although no careful description or analysis of features or artifacts has yet been done, we can note several significant finds. The presence of many files, for instance, suggests that locomotive construction in the 19thC required a great deal of hand fitting. Of singular interest is a round brass manufacturer's plate, 8" diam, bearing the legend "New Jersey Locomotive and Machine Co., Paterson." Although that company was on the site between 1850 and 1857, the building was identified with the Grant Locomotive Co during most of its use.

Other excavations, in various stages, include a profile cut of the middle raceway, providing information on the race's construction and original position, and an excavation along the largest erecting shop of Rogers Locomotive Wks, revealing a cellar that had long been covered by 5 ft of slag and fill. We are now testing an area where research suggests a RLW smith shop and a separate hammer shop were located. The smithy may have contained 50 forges.

A salvage archeological precedent was set in this project: the departments of transportation supporting research by an archeological observer, whose work entailed observing highway excavation near, but not in the nationally recognized district. Budd Wilson (SIA), known for his glass-house site dig at historic Batsto Village in South Jersey, is the observer. He has shown that much useful information can be gleaned through such last minute observation. Although he had authority to halt construction, the cooperation of S J Groves Constr Co's crew made this unnecessary. Most importantly, the Lackawanna RR station was recorded before demolition. Beneath the RR embankment, portions of the Morris Canal's sandstone walls were unearthed. Canal muck, full of artifacts, was exposed after some 70 years. As the excavation expanded, major elements of a partially burned canal barge emerged.—Edward S Rutsch.

Mr Rutsch will report further. He invites those interested or who have pertinent information or questions to contact him at the GFDC lab, 15 1/2 Van Houten St, Paterson 07510, (201) 278-2800.

ADAPTIVE USE HANDBOOK GRANT TO SIA

On the heels of last issue's announcement of the SIA slidefilm and its funding by the Natl Endowment for the Arts and Educational Facilities Laboratory, we are pleased to report a second award. This, from the Natl Endowment for the Humanities, is of \$12,950, for a much needed handbook on the adaptive use of industrial and engineering historic resources. The original proposal was submitted to NEH last Dec. Notice of award (for the full amount requested) was received on 16 May.

Almost immediately thereafter, a selection committee was formed and began reviewing applications for the author/editor position. From an impressive field of c20 candidates, Ober Park Assoc Inc, Pittsburgh, was chosen in July. Headed by Arthur Ziegler, Jr (SIA), long active in Pittsburgh's preservation programs, the firm is publishing the *Historic Buildings of America Survey Series*, on a state and regional basis, as well as a set of guides to historic preservation. OPA has appointed Walter C Kidney (SIA) editor/writer. He will work closely with SIA in developing the book. If all goes well, the handbook should be available by late summer, 1974.

In addition to selected case studies, the format includes a catalog of Fedl, state and municipal legislation relevant to industrial site reuse; a detailed review of private and public financing that may be available for rehabilitation and reuse, and a bibliography.

The proposal was prepared by the SIA Preservation Committee, chaired by VP Chester H. Liebs. Project supervisor for the grant is Ted Sande.

Mr Kidney is eager to hear of possible case-studies for inclusion in the handbook (adaptations of historically interesting industrial structures completed or well under way in the US and Canada). Remodelings for industrial, commercial, residential, and educational purposes are of interest, as long as they respect the original structure's character. WCK, 2270 Chatfield Drive, Cleveland Heights, OH 44106.

The AIA

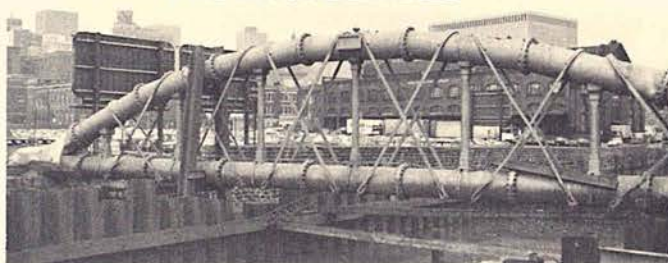
At the Natl Conference on IA held on the Isle of Man (SIAN 2:3:2) in Sept, a (British) national IA organization was established: the **Association for Industrial Archaeology**. Officers and 5 council members were elected, 5 additional council seats will be voted at a public inaugural meeting in London late this year. L T C Rolt is president; R A Buchanan, VP; Neil Cossons (SIA), secy; John Diaper, treas; John Butt, editor; Michael Bussell (SIA), conference secy; Michael Rix, Fred Brook, Christine Vialls, Keith Falconer, & Douglas Hague, council.

The precise function of the assn hasn't been defined, but it is anticipated that it will be a largely federal body uniting the many local IA societies plus having institutional, industrial and individual members. Publications are planned. Although the AIA has been created as an essentially British group and probably will always remain so, it seems likely that some degree of internationalism will develop, a key element of which, we would hope, will be a strong functional bond with the SIA.

A "Blueprint," to assist the organization's launching by stating basic requirements within the field of IA in Britain, was presented at the Sept meeting by Cossons. Its principal aims are: to promote better standards of recording; to insure the conservation [preservation] of significant IA material; to promote research into techniques of IA recording and conservation; and to promote broad-based sympathy for recording and conservation of IA sites and areas.

A fully organized program of development will emerge as the assn takes more tangible form. We wish it well, and will report on its progress with interest and frequency.

PIPE TRUSS DELIVERED



Lombard St. Bridge in transition. Top: the bifurcated "Water-pipe" center truss still in place spanning Jones Falls. Bottom: the two Pratt side trusses, having been lifted out intact, in temporary storage.



Bollman's unique water-pipe truss bridge on Lombard St, Baltimore, reported in jeopardy (SIAN 1:1) has, through a series of coincidences, been given a lease on indefinite life. The city felt compelled to replace it with a new bridge capable of heavier loadings, a separate water main to take over its hydraulic duties, but the Dept of Public Works, taking a position uncommon among DPWs generally, was willing to bear the cost of carefully dismantling the bridge, and re-erecting it elsewhere in the city.

Almost simultaneously with this announcement, hurricane Agnes in June 1972 carried away the sole access bridge to the Ballymena Mill, c1860, in the historic textile mill village of Dickyville, west Baltimore, which only 36 hours earlier had been purchased by a partnership that intends to restore the mill for lease to light industry or other usage. Dickyville is both a Baltimore and Natl Register historic district. It was apparent to all concerned that the historic span was the logical replacement for the other one, and the MD Historical Trust, the state's historical agency, began to pull the pieces together.

MHT has succeeded, principally through the efforts of Dir Arthur Townsend (SIA), in assembling the \$110,000 funding package, from city, state, the mill's owners, and because the Bridge also is on the Natl Register, from the Fedl Govt. Site work will begin shortly. The two outer lines of trussing already have been taken down intact and stored; the center "waterpipe" truss will stay in place until the replacement main is in.

NUFOB

It means New Uses for Old Buildings, and specifically, *industrial buildings*. Yes! In a pioneering scheme by the state of CT, "sturdy but outmoded" industrial facilities will be revitalized providing low-cost space for new, small firms, encouraging their growth and development. NUFOB, administered by the CT Development Commn, is beginning with a \$100,000 grant from the New Engl Regional Commn. The first project involves the sprawling New Haven complex, idle since 1965, of the late A C Gilbert, dear to the hearts of generations of boys for giving us the Erector Set, American Flyer electric trains, and a gang of other training aids for incipient IAists. *CT Devel News*, Fall 1973.

Lowell Locks Restoration. The Commonwealth of Mass is being asked by the Human Services Corp to fund, as a Bicentennial project, restoration of the series of locks on the Pawtucket Canal, that permitted navigation around the Pawtucket Falls of the Merrimack and pre-date the famed power canals there, once more allowing boats to pass the Falls and the dam erected by the Proprietors of Locks & Canals on the Merrimack River. *Towpath Topics* (Middlesex Canal Assn).

LANDMARKS, AWARDS & DESIGNATIONS

The ASCE has designated three more Natl Historic CE Landmarks: 1. The Erie RR's great **Starrucca Viaduct** at Lanesboro, nr Susquehanna, PA, 1848, which with the Canton and the Thomas viaducts characterizes the heavy masonry tradition in the US at the height of its glory; 2. **Buffalo Bill (formerly Shoshone) Dam** nr Cody, WY, 1910, once the tallest in the world and marking the beginning of the exact science of the design of large, concrete arch dams; and 3. the Camp-tonville, CA site where in 1878 Lester Pelton perfected the **modern, high-efficiency impulse hydraulic turbine or Pel-ton Wheel**. The Viaduct was honored at an Oct ceremony that featured trains simultaneously crossing over (Erie) and under (D&H), and an account of its history by local resident, Editor of *Railroading* (SIAN 1:2:4), and author of a forthcoming monograph on the Viaduct William S Young (SIA). Full Acct: *Civil Engineering*, July, p 96. (cf SIAN 1:4:2)

Meanwhile, the American Water Works Assn has since 1969 designated the following American Water Landmarks: **Michigan Ave Water Tower**, Chicago; **High Bridge Water Tower**, NYC (SIAN 2:2:4); **Old Mission Dam & Flume**, San Diego, CA; **Theodore Roosevelt Dam**, Phoenix, AZ; **Cascade Aqueduct**, Los Angeles; **Gary-Hobart Water Tower**, Gary, IN; **Standpipe Water Tower**, Louisville, KY; **Water Tower**, Riverside, IL; **Bethlehem (PA) Waterworks**, 1762; **Eden Park Water Tower**, Cincinnati, OH; **8th Ave South Reservoir**, Nashville, TN; **Filtration Plant**, Elmira, NY; **Indiana Central Canal**, Indianapolis; **Big Hole Pump Station**, Pump No 2, Butte, MT; **Cabin John (MD) Aqueduct Bridge**; **Fresno (CA) Water Tower**; **Druid Lake Dam**, Baltimore, MD. AWWA, 2 Park Ave, NYC 10016.

The Green Island (NY) Shops, 1871, ex-Rensselaer & Saratoga, has been placed on the Natl Register. This may well be the earliest standing RR shop building in the NE, and among the very earliest left in NA. It's now occupied by a scrap dealer. Full account in *M-HAS Report* (Reviews).

2 out of 3 Historic Preservation Awards made recently by the Washington Chap of the American Inst of Architects were for industrial structures: **Colvin Run Mill** restoration (SIAN 1:5), Fairfax Co, VA; and **Canal Square**, Washington, cited "for its innovative use of deteriorated 19th-century industrial structures [Georgetown ex-factories built by H Hollerith, inventor of electric punch-card sorting] as part of a superbly designed, expanded and mixed use commercial complex [restaurants, offices, shops]."

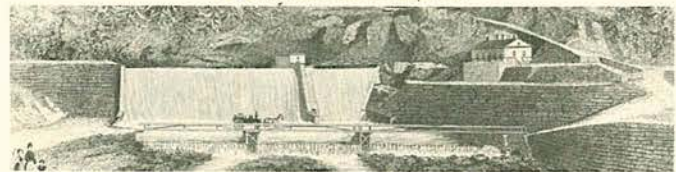
Of special importance, the American Soc of Mechanical Engineers, through its History & Heritage Comm, in Dec will designate the first two **National Historic Mechanical Engineering Landmarks**, with appropriate ceremonies. The first is the triple-expansion steam pumping engine, with Riedler pump valves, designed in 1894 for the Boston Water Works (now Metropolitan Distr Commn) by Erasmus D Leavitt of Cambridgeport, MA, at the time America's most esteemed ME and designer of large, highly efficient steam engines. He also was a founder of ASME and its 2nd pres. The engine, the only of Leavitt's many works to survive, has been out of service for c20 years but is in fine condition. It is in MDC's Chestnut Hill high-service pumping station, 6½ miles SW of Boston, where the ceremony will occur 14 Dec at 2:30. Those interested are invited. The other NHMEL is the Ferries & Cliff House Cable Ry, San Francisco, 1887. Although its original steam driving engine was replaced by a motor long since, the powerhouse does contain the original cable winding machinery. The ceremony there took place on 30 Nov. Additional NHMELs will be nominated and marked each year.

SoHo a Hist Dist

SoHo, an area of 26 square blocks in lower Manhattan bounded by W Broadway, and Crosby, Canal, and Houston Sts (so named because of its location south of Houston), has been designated a historic district by the NYC Landmarks Preservation Commn. Among its scores of distinguished mid-19thC commercial buildings is the largest agglomeration of cast-iron structures anywhere, including many of the nation's finest. SoHo's cast-iron buildings illustrate a significant phase in structural technology, as well as an American contribution to architectural history. Cast-iron facades, usually of Renaissance inspiration, could be produced both cheaply and quickly, but went out of vogue in the 1880s when developments in steel-skeleton construction and high speed elevators made the skyscraper possible. Ironically, post-WW II developments in panel and curtain-wall design clearly have their origin in techniques of 19thC cast-iron building.

Proponents of landmark designation for SoHo—the Municipal Art Soc, the AIA NY Chap, the SIA in the form of a resolution to the mayor passed at the Troy meeting in April, and mainly, Friends of Cast Iron Architecture (SIA)—feel that preservation of its unique buildings will stabilize the community and help maintain its balance of commercial and residential use. FOCIA (44 W 9th, NY 10011) emphasizes, however, that not all significant cast-iron architecture is in SoHo. Other noteworthy structures are threatened, and these also should be surveyed to encourage a fate as happy as that of the SoHo buildings. *Robert C. Post.*

Hydraulic Monuments



Old Croton Dam: At completion and just before inundation.



On 19 June two monuments to hydraulic engineering were placed on the Natl Register. **Old Croton Dam**, Westchester Co, NY, designed by John Bloomfield Jervis and completed in 1842, and **New Croton Dam**, completed in 1906, were both built as part of major aqueduct systems to supply New York City's water. The first is now beneath water impounded by the second.

With its 50-ft height, Jervis's dam was the first large masonry dam in the US. It provided the model for many succeeding dams. Jervis was the first to make use of an ogival spillway—that is, one whose lower face has, in Jervis's words, "a reversed curve that would carry the water down at a smooth volume." The dam was built on timber cribs, and, like the New Croton Dam which covered it with 30 feet of water, was a gravity dam with a granite ashlar facing and rubble core.

In its time the New Croton Dam (297 ft high) was the largest dam yet built, and still remains the largest purely of masonry. To Alphonse Feley's original part-earthen-part-masonry design of 1892, major changes were made by each of the Aqueduct's succeeding engineers. Chief among these was the total removal of the earthen dam when nearly complete in the fall of 1901, due to cracks in the core-wall. One of its distinguishing features is the original curved 1000-foot spillway, at right angles to the main dam, designed to take advantage of the rocky north side of the valley for the waste channel. *Peter H Stott, Mt Kisco, NY.*

IA Course

The American Civ Dept, Univ of PA, will offer a course under Prof David G Orr (SIA) in American IA beginning Spring Term, 1974. Methodology, such as field recording, surveying, drawing, site photography, and other techniques will be stressed, together with an examination of the significant industrial monuments of the Philadelphia area. Field trips will cover the textile and steel industries, bridges, transport and power centers, and mills. The course will survey the growth of industry in Philadelphia by relating these monuments to social and technological history. Class projects will involve establishing an index of the important IA sites and manufactures of Philadelphia.

MISC SITES & STRUCTURES

Uncertain that it's IA, we report with some trepidation that according to the *HUD Newsletter* (2 July), the (US) Dept of Housing & Urban Devel has contributed funding for the preservation, in Council Bluffs, Iowa, of the **Old Pottawattamie County Jail, 1885**. Now this isn't your commonplace lockup, but is distinguished by being one of the few survivors of 6 "Lazy-Susan" correctional institutions, radial structures with 30 wedge-shaped cells on 3 stories, with a central hand-cranked ring gear mechanism that made possible constant surveillance of the prisoners by the jailer. It *sounds* industrial...

An ancient **combination baggage-passenger car**, possibly the



oldest extant in Canada, has been rescued from ignominy as a farmer's shed for the Natl Museum of Science & Tech, Ottawa, by Curator of Industrial Tech R J Corby (SIA). Built for the Carillon & Grenville, a broad gauge (5'-6") (probably the last on the NA Continent) that ran along the Ottawa River's N shore, Corby ventures that it was built in Montreal in 1854. Restoration is planned. *Ottawa Citizen*.

Restoration of the Tannehill Furnace & Foundry (SIAN 1:6) at Tannehill State Park nr Birmingham, AL, is slated to begin in Dec. This involves the first of three furnaces built by the Tannehill Ironworks, in blast in 1859. When restoration is completed, it will be recharged and a run of iron made under the supervision of the Univ of AL and local steel mills. An adjacent double furnace, 1863, will be reconstructed as funds become available. Initial funding is being provided by the state and the Birmingham local of the United Steelworkers of America. The Tannehill Furnace & Foundry Commn (SIA) (Box 2407, Tuscaloosa, 35401) is seeking Fedl matching grants, and other funds.

Having been declared surplus, about 60 acres of the historic **Watertown, MA, Arsenal** were purchased from GSA by the Watertown Redevel Auth for \$5.5 million. That was in 1968. It was hoped that commercial and industrial development would follow, but no acceptable proposal has ever been received and the property remains vacant. In June a committee was formed to study alternative public uses in cooperation with DOD's Economic Adjustment Commn. Proposals included converting 25 acres into a park along the Charles; a cultural-educational-recreational complex including a transportation museum, and devoting 5 acres around the original arsenal quadrangle to community use. The committee reports that most of these proposals are feasible, but that certain bureaucratic restraints must be eliminated before any are implemented. An application to the Economic Development Agency for \$67,000 for advanced planning is in work.

Mills—New Hampshire. The efforts to preserve and reuse the **Belknap Mill**, Laconia (c1823, brick, cotton, superb) as a community center, which have been among the most protracted and cliff-hanging of all time, appear at last to be on the final down hill run. Save the Mill Society (SIA) is conducting a \$150,000 funding campaign, of which \$93,000 already has been given by the Fedl Govt. The ex-**Holden Woolen Mill** (1863), W Concord, has been tastefully converted into



21 apartments by a small private firm, the success of the project—Mill Plaza West—being taken as a good omen by NH preservationists. The mill's belfry is to be restored. Although NH's larger centers: Manchester, Nashua, Harrisville and Laconia have received considerable adaptive-use attention, there are many rural mills and factories of distinction with potential for conversion that warrant the consideration of developers. This is true throughout NE, of course. *Bryant Tolles, NH Hist Soc.*

Mills—England. As its main contribution to European Conservation Year, 1975, the (Brit) Natl Trust hopes to outfit the Quarry Bank Mill (1784) in Styal, Cheshire, as a museum of the origins of the British textile industry. The property was presented to the Trust in the late 1930s by a great-grandson of the original owner, and the grounds surrounding the workers' cottages (many still occupied by descendants of mill hands) have long been open to the public. Heretofore, visitors have come simply to enjoy these grounds, since Quarry Bank scarcely fits the grim stereotype of the early English cotton mill. It is situated on the lovely western slope of the Pennines, and its master, Samuel Greg, tried to provide his employees with a reasonably pleasant environment. Quarry Bank has thus attracted some attention for its relevance to social history, but now an increasing amount of interest from the standpoint of the history of technology, architecture, and industrial processes. The Trust has been terminating the leases of small firms occupying the mill building, while starting a search for appropriate machinery to refit it. Offers have already been received of machinery and other hardware, including a set of muzzle-loaders the Gregs relied on for protection during the Luddite uprisings of the early 19thC.

A M Sullivan reports in the NJ Historical Commn *Newsletter* (Sept) that **Oxford Furnace**, Warren Co, a state historic site, and subject of a detailed restoration study by restoration acht John M Dickey (SIA), ignored by its owner, the state, is crumbling.

The Ice Industry. The last operating ice house in Maine has closed and is in danger of physical collapse as well. The Herbert W Thompson ice house in S Bristol was built c1825 and missed not a season since. Ice was cut from a 1-acre pond, 18-20 men stocking 8 tons in 2-3 days. Ice once was shipped as far as Florida. The building has developed a bad list to the south and chances for survival appear meagre. The natural ice industry throughout the 19thC was an enormous and important one, giving rise to a class of structure (ice houses of truly colossal proportions once dotted the upper Hudson, Kennebec and other rivers and lakes throughout the NE US and Canada) that has entirely disappeared. If Thompson's—to be sure a midget compared to those—can be measured and drawn before it succumbs, the record will be unique. *Danny A Morris, Lincoln Co (ME) Cult & Hist Assn.*

MISC NOTES

Dark & Satanic we'll allow, but this is ridiculous. WNET's *Image* reports that "Feasting with Panthers," a play based on the life of Oscar Wilde, was videotaped for the "Theater in America" series in a rubble-filled former cotton-cloth finishing mill (1863) in Providence, RI, because it was deemed to resemble closely the prison in which Wilde was incarcerated.

NH Architecture. As a Bicentennial project, Bryant Tolles, Jr. (SIA), Asst Dir, NH Hist Soc, is preparing an illus guidebook to NH's extant architecture for spring, 1976 publ. It will cover the full scope of NH architecture, chronologically and topically by building type, and will, of course, include many industrial structures from the state's textile and mfg centers.

Society for the Hist of Techn annual meeting, San Francisco. The session, *Innovations & Their Impact* will include several short papers of IA interest: Pacific telegraph cable; American mfgd gas industry; sugar beet production; tanning; electric power. Sir Francis Drake Hotel, 27 Dec, 2:30. Full details: Editor.

Intra-IA Adaptive-Use Puzzle Picture. Can you find, in the



1958 coal breaker, just demolished in Dickson City, PA, the ex-RR hopper cars impressed into duty as coal pockets (bunkers)?

Research inquiry: Historic Hardware. The Assn for Preservation Technology plans a special spring Newsletter on HH. Information on all aspects of the subject are sought: location of: collections; experts; suppliers & replicators; publ & unpubl research; primary source material; etc. Theo Prudon (SIA), 504 Avery Hall, Columbia Univ, NYC 10027.

Some publications may call them *Whatsits?*, we prefer **Graphic Research Inquiry**. We ask, nevertheless, what, where and



when is it? Stereoscopic photograph, c1870-80 by Horton & Davis, Greenfield, MA, weighting the scene toward the Connecticut River. Power canal? Navigation bypass canal? What is the timberwork above the masonry? A large dam is seen at center. Editor.

Research & Recording Needed

Lime processing works of the Riverton Corp nr Front Royal, VA, consisting of a tall stack, long horizontal flue, kiln, tip-les, bunkers, housing, conveyors, all apparently c1900, perhaps earlier, soon to be abandoned. Photos & data: Editor.

The 5 Great Western sugar beet plants in western Nebraska, and possibly their plants in Colo, that operate large Corliss engines, running only 90 days per year.

The Southern Pacific's Sacramento, CA shops, the earliest elements built c1870, still are in use but threatened with abandonment and demolition. These are the earliest RR shop facilities in the Far West.

The Thompson Ice House, ME. (See *Ice Industry*, above.).

SIA AFFAIRS

Rideau Trip. This excursion, held jointly with the American Canal Soc and our first two-day tour was, with the exception of the weather, a smash. A *Supplement*, ablaze with vivid descriptions and illustrations, accompanies. Plans are in work for a spring trip to some part of the NE US.

SIA MONOGRAPH SERIES

The Society plans to expand its publications program, in the form, at the outset, of a Monograph Series. If you have a publishable manuscript complete or nearly so, on a subject pertinent to some aspect of IA—broadly interpreted—well illustrated, minimum c7500 words, please contact the Editor.

Mill City



An extensive exhibit on 19thC Lawrence, MA, a major center in the industrial revolution, is being held until 31 Dec at the Lawrence Public Library. Sponsored by the Merrimack Valley Textile Museum (SIA), Boston Univ and LPL, the exhibit will focus on "New City" on the Merrimack—everyday life in 19th century Lawrence." Photos, documents, and mill equipment will illustrate the arduous daily existence of the workers and the emergence of the city as a leader in the textile industry.

"We want to make the public aware of the drama of the city's first 50 years, from 1847 to the close of the century," said Thomas W Leavitt, MVTM Director. "The exhibit will depict such events as the instant creation of a mill city on what had been open fields; the influx of tens of thousands of immigrant laborers; the rise of boarding houses, tenements and other dwellings; and the collapse of a mill in which hundreds were killed or injured." The exhibit also will recreate the lifestyle of the typical mill family. The visitor will hear taped "interviews" with workers telling how they spend their work and leisure hours.

PUBLICATIONS OF INTEREST

Morris W Abbott, *Cog Railway to Pikes Peak*. San Marino, CA: Golden West Books. \$1.95 paper.

Anthony Burton, *The Canal Builders*. London: Eyre Methuen (US: Harper & Row). 1972. 230 pp incl 16 pp illus, maps, etc. \$11.

Ranulph Bye (SIA), *The Vanishing Depot*. Livingston Publ Co, Box 336, Wynnewood, PA 19096. 60 color; 27 B/W paintings. \$20. Reproductions of depots, great and small, throughout the NE US, by one of our finest watercolorists. Bye's work is realistic and eloquent, the ideal medium for expressing the nostalgia inherent in the subject.

Philip E Cleator, *Underwater Archaeology*. NY: St Martins Press. 224 pp, illus & maps. \$6.95.

John M Coles, *Field Archaeology in Britain*. London: Eyre Methuen (US: Harper & Row). 1972. 267 pp. Illus. \$12.50

Robert de Gast, *The Lighthouses of the Chesapeake*. Baltimore: Johns Hopkins Univ Press. 174 pp, illus, maps, bibl. \$12.50. Beautiful photographic study, handsomely produced. All standing + demolished examples map-located and fully described. The artistic side of IA at its best, without slighting the technological.

Wm L Morse, "Ironbridge Gorge Museum," in *Machine Design*, 4 Oct, pp 20-25. Good illus and diagram of operation of the Hay canal incline there. Also:

Richard Fifield, "Bedlam Comes Alive Again," in *New Scientist*, 29 March, pp 722-75. Fine description of this preeminent site (IGM) which includes the Bedlam Furnace. An interesting subarticle, "Phoenix From the Cinders," tells of the conception and formation of the Museum. See SIANS 1:1 & 3; 2:4. And finally:

Peter Watson, "A Museum of Industry," in *Illus London News*, Aug, pp 37-43. More on IGM, with superb color photos.

Hoosac Tunnel Centennial 1873-1973. B&M Bulletin, Fall Issue. 20 pp + 1899 Fitchburg RR timetable + color postcard. Boston & Maine RR Hist Soc, Box 302, Reading, MA 01867. \$1 PP. Fine piece of work, highly recommended.

✓ Philip Riden, "Post-Post Medieval Archaeology," in *Antiquity*, Sept, pp 210-16. A somewhat depressed, cynical review of IA's accomplishments (or lack of) and general health (or lack of) to now, from the viewpoint of the traditional archeologist, not unrealistic in some areas and food for thought for us all, but don't let it get too deeply to you.

T A Sande (SIA), *The Architecture of the Rhode Island Textile Industry, 1790-1860*. PhD dissert, UPa, 1972. Microfilm \$4; bound xerox \$10. Univ Microfilms, Ann Arbor, MI. 271 pp. Development of mills in terms of siting, function, stylistic influence, etc. All-time list of firms & mills; maps, illus from HAER/HABS surveys and other sources. Invaluable for workers in this field.

— "The Natl Park Service and the History of Technology: The New England Textile Mill Survey," in *Technology & Culture*, July, pp 404-14. NETMS and other HAER IA surveys. Illus.

The Slater Mill Historic Site—*A Photographic Guidebook to the Museum & its Collection*. Old Slater Mill Assn, Pawtucket, RI 02861. A handsome, strongly impressionistic graphic survey of this important site. 32 pp. Become a member and one is yours; others, \$1.50.

n H White, Jr, "The RR Reaches California: Men, Machines & Cultural Migration," in *Calif Historical Quarterly*, Summer 1973, pp 131-44. Illus.

The Railway & Locomotive Historical Soc's *Railroad History No. 129* (Autumn) is heavy with IA:

✓ Wm E Warden, "Claudius Crozet: Napoleon's Captain vs the Blue Ridge," pp 44-55—RR, canal and tunnel construction in western VA, 1850s,

Herbert H Harwood, Jr (SIA), "Nothing at the End of the rainbow: The B&O's Adventures in Western PA," pp 56-70, and

✓ E D Galvin (SIA), "The Canton Viaduct," pp 71-85—built 1834-35, still the largest masonry bridge in New England.

REPRINTS

Re the cogent comments of Dianne N Macdougall on *100 Years of Brewing* (SIAN 2:4) recent developments have witnessed not one but two reprints issued of the 1903 classic sponsored by THE WESTERN BREWER (1876-1919). The 9" x 13", 718 pp "universal history of brewing" is still very deserving of that title despite the passage of time and changes in the industry. The comprehensive discussion of brewing technology, brewers and breweries, eg, is detailed and well illustrated. Initial printing was limited. Recent years have seen the designation "scarce" applied to the volume and \$250 prices. While the c700 illustrations have lost some of their original printing brilliance, Will & Sonja Anderson, Possum Ridge Rd, Newtown, CT 06470 (\$35); and Bob Secrist, Walden Hill Country Store, Box 424, Wadsworth, OH 44281, (\$35) are to be congratulated. Douglas A Bakken, Anheuser-Busch, Inc.

Patrick Geddes (Sir), *City Development, a Report to the Carnegie Dunfermline Trust*. Modern intro by Peter Green. New Brunswick, NJ: Rutgers Univ Press. Photo-reprint of 1st edn (1904), Edinburgh. 231 pp, \$22.50.

Special Offer. E L Kemp (SIA), "Charles Ellet's Contribution to the Development of Suspension Bridges." *ASCE Meeting Reprint 1805*, Oct 1972. 30 pp. Good summary of his proposals and actual works, with special ref to the sole survivor: Wheeling Suspension Br, 1849. Copies available, courtesy ASCE (SIA), to the 1st 100 who send 16¢ in STAMPS to Editor. ✓
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Toote

Maps & Charts. Lowell (MA) Historical Soc (Box 1826, 01853) has published a 6-map portfolio based on items in its own collections: Pawtucket Farms—1821; Lowell & Belvidere Village—1832; Lowell—1845; Ethnic Districts—1912; Lowell with dates of Annexation—1914. \$3.00. ● **Coastal Charts.** Surplus available, mainly Alaska, Oregon, Georgia, SC, Maine, Puerto Rico, c1910-40, 38" x 40", \$3.50; repros of 26 Wilkes Expdn charts of Pacific NW, 1841, \$.75 each; photocopy of Newark Bay chart, 1839, \$2. Full data: Natl Ocean Survey, Phys Sciences Survey Br (C513), Rockville, MD 20852. ● Extensive listing of offset-reproduced **city, county, state and other maps**: the Far West; RRs; mines; atlases; &c &c: Gerald A Noble, Drawer E, Hiawatha, Iowa 52233. (319) 365-5545.

David & Charles, well-known English publishers in IA and related subjects, has established itself in NA, and can provide current catalogs direct: *New Books July 73-Jan 74*; *New Ry Books*. D&C, Inc, N Pomfret, VT 50503. (802) 457-1911.

REVIEW

A Report of the Mohawk-Hudson Area Survey. A Selective Recording Survey of the Industrial Archeology of the Mohawk & Hudson River Valleys in the Vicinity of Troy, New York, June-September, 1969. Robert M Vogel, Editor. Smithsonian Studies in History & Technology No 26, Smithsonian Institution Press, Washington, DC. 1973. 210 pp, illus. From: Supt of Documents, GPO, Wash, DC 20402. \$3.35 PP. No 4700-00258.

This report consists of two parts. Part 1 consists of a 21-page description of the survey team, the techniques employed and the costs of the project. Conducted by the Historic American Engineering Record, the Survey was sponsored by the Smithsonian Instn, the American Society of Civil Engineers, and the NY State Office of Parks & Recreation, as well as the Natl Park Service.

Part 2—the bulk of the Report—consists of the Survey Record, the historical, biographical, engineering and architectural data for the 15 structures covered by the survey. Illustrations supplement the text at every appropriate point. Photographs, measured drawings, engravings and lithographs all serve to illuminate the subject.

This may be the most comprehensive catalog of its type yet turned out by industrial archeologists on either side of the Atlantic. But Vogel's disciplined pen has all but eliminated the chatty quality which characterizes the published works of English industrial archeologists. Only Samuel Rezneck manages to insert his own point of view consistently.

Who might we expect to use the data which has been meticulously assembled here? I can think of five groups whose members will find this Report valuable: historians of technology, urban historians, business historians, architectural historians and, of course, members of the SIA clan. For all of these, the *Report* will be, on occasion, an important reference work.

Thomas W Leavitt

Merrimack Valley Textile Museum