

SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

Volume Four Number 1

January 1975



Left: Starrucca House, in about 1900. The cupolas and much of the canopy have been removed. Right: the Great Dining Hall, a view of c1875 from a stereograph, collection of Kathleen Hoeft. *William S Young photocopy.*

RAILROAD STATION-HOTELS—A SECOND LOOK

Railroad structures that were both stations *and* hotels were built in America before sleeping and dining cars came into vogue (roughly 1850s-80s) and made such good sense that there should have been many of them; in fact, there probably were. But those that survived to the 20thC eventually lost their hotel function and came to be regarded only as stations. Enough survivors of the special class, however, have now been discovered that no longer may we label such structures extremely rare.

Small, thought-to-be station-hotels (n.d.) have been found, for example, at Martinsburg and Newburg, W.Va., both B&O, and at Gainsville, Conn. But the most impressive station-hotel to come recently to light is one built in 1875 by the B&O at Chicago Junction [S of Sandusky], Ohio. Renamed "Willard" in 1917 for Daniel Willard, then president of the RR, the town had been established c1872 as a junction point on the freshly laid Pittsburgh-Chicago main line. Built by contractors Dougherty & Ferguson, the station-hotel was quickly followed by a roundhouse and other service facilities.

The B&O unquestionably was the most assiduous builder of grand RR station-hotels, for it erected at least 3 others, all at important junctions. The one at Chicago Junction may have been its last, although the RR did build resort hotels slightly later. Like the majority of others, it is loosely described as "Victorian Italianate" and like the B&O's late Grafton [W.Va.] House—a strikingly similar building—(1857, additions 1872) and Viaduct House (1872), Relay, Md., this station-hotel is in plan comprised of three rectangular blocks arranged in diminishing scale within a general T shape—apparently a functional design to fit the site since all three buildings were wedged into the Y of a railroad junction.

Portions of the building at Willard still are used by the B&O

for their original purpose as freight offices but the passenger station and hotel functions no longer survive. It is in good condition and recently was nominated to the Natl Register by the Western Reserve Historical Society, Cleveland.

Another Station-hotel, the Erie's magnificent Starrucca House (c1865), at Susquehanna, Penna., is by no means a recent discovery but it is news. Unlike the elegant Queen City (B&O, 1872), Cumberland, Md., razed in 1971 despite a fierce preservation battle, it seems that this station-hotel is destined for rehabilitation and adaptive use. Starrucca House is unique as a station-hotel, not merely because it survives, but because it may be the oldest, largest, and only Gothic Revival example to remain. Also, it stands as part of a RR complex along with a group of contemporary stone repair shops.

It was essentially abandoned by the RR late in the 1960s. It was recorded in 1971 by HAER and a local group formed to save it. In 1972 it was entered on the Natl Register. Now a Station Subcommittee of the newly constituted Susquehanna Depot Area Mayor's Council on the Arts has taken it in hand, engaging the Philadelphia firm Day & Zimmerman to prepare



Baltimore & Ohio RR station-hotel, 1875, Willard, Ohio. *Western Reserve Historical Society photograph by Eric Johannesen.*

Room 5020

Published by the Society for Industrial Archeology
National Museum of History & Technology

Editor: Robert M. Vogel

Smithsonian Institution

Washington, DC 20560

an adaptive multi-use proposal. While the building's interior has been considerably altered, little of the Gothic detail, inside or out, has been lost, and the original vaulted ceiling treatment of the dining hall—which originally extended the building's full 2½ story height—remains under later construction. Restoration of this cathedral-like space is a priority.

Photographs and a recent personal inspection reveal that winters, vandals, and neglect have rendered the fine old building a near ruin, and the Borough Council wisely has authorized temporary measures to secure it against further damage. Susquehanna has a huge task ahead, but one battle, perhaps the biggest—getting the community (which is economically depressed and somewhat isolated) to accept as worthy of preservation a decaying structure like Starrucca House—already has been fought and won. *DN*.

[See Newell's "The Short-Lived Phenomenon of RR Station-Hotels," in *Historic Preservation*, July-Sept 1974 [SIAN 3:6:9].]

IA ON THE NATIONAL REGISTER

We do indeed seem to have started into an age of enlightenment, as more and more states are including among their nominations to the Register sites and structures having purely industrial & engineering significance. Much of this has resulted, of course, from intelligent guidance and occasional light "pressure" from the IA community. The inertia having been overcome, the time is ideal to keep leaning. Don't let up now.

SUBSTATION "C". A new and impressive addition to the NR is Pacific Gas & Electric's Substation C at 222 Jessie St, San Francisco, dating back to 1881. Out of service since the late 1960s, it has been scheduled for demolition to make way for the Yerba Buena Center. Entry on the NR, of course, strengthens the case for preservation.

The structure's history is as interesting as its appearance. The original building was enlarged in 1883 and again in 1892. In 1905 it was thoroughly redesigned by distinguished San Francisco architect Willis Polk, but construction was not begun until after the great 1906 earthquake & fire. Subsequently several additions were made by Polk.

The principal facade, featuring a statuary group of four cherubs with garlands of fruit and gourds in the classical manner, is the station's outstanding feature. Polk, after the philosophy of the City Beautiful Movement, designed the facade to reflect the owner's desire that the utilitarian structure be also a formidable esthetic contribution to the city. As architectural historian Richard W Longstreth [SIA] of Univ of Calif.—Berkeley points out, this movement was later the object of "no small amount of scorn by generations fed on the machine esthetic." He believes, however, that Polk's imaginative ornamental approach was entirely appropriate, and that the structure, with its vast interior spaces, "could very possibly be made a valid element in future plans for the area." The possibility of incorporating the substation into the new center needs careful study. *EMB*.



Richard W Longstreth photograph.

COTTON GIN. A recent addition to the Register is the Watson Steam Gin (locally aka the Buena Vista Cotton Gin), near Port Gibson, Miss. The only known gin site in the state with above-ground remains, the brick chimney alone survives of the 2½-story frame plant. It is held an outstanding example from a period and industry of great importance in Miss. history. Soon after Eli Whitney's invention, Miss. planters began making their own modifications, and were the first to envision substitution of steam for human & animal power to run gins. The use of steam was possible only for the wealthiest and most enterprising planters, because of the high cost of machinery. James W Watson was a prosperous and prominent planter whose inventories attest to an impressive agricultural empire. His gin was built c1848, originally run by horse power; conversion to steam took place probably between 1857 and 1861. *EMB*.

COTTON MILLS. The late 19thC saw a wave of industrialization in the deep south. In Starkville, Miss., two historic cotton industry structures from this era have been nominated to the NR: The John M Stone Cotton Mill began operations in 1902, shut down in 1962, and now houses the physical plant dept of Miss. State Univ. It is a first-class brick mill of its time, designed by the eminent mill engineer Stewart W Cramer of Charlotte, N.C.

In 1900 Mississippi A&M College (now Miss. State U.) fought for and won state funding for a Textile School; with establishment of the Stone Mill, part of a vigorous campaign to enhance the area as a center of the cotton industry. The school was set up in a mill-type building of "fine architectural effect," fitted out as "a miniature cotton factory for instruction in all the details & manipulation & manufacture of cotton goods." Following the panic of 1907 the school limped along until 1914, when the machinery was disposed of and the building turned to other uses. Lisa Reynolds [SIA], Architectural Historian for the Miss. Dept of Archives & History, believes both mills deserve inclusion on the NR because of their importance as prototypes in the partnership of industry & education, and because they exemplify creative preservation through adaptive re-use.



Model Mill of the former Mississippi A&M College Textile Dept. Mississippi Dept of Archives & History photograph.

CLEVELAND has, under the leadership of its Landmark Commn chairman John Cimperman, started heavily into IA nominations. The Division Ave [water] Pumping Station already is on the NR, on the basis not so much of the building, but of the large Allis-Chalmers vertical triple-expansion steam pumping engine that was permitted to survive a scrapping. One of its two mates is gone, the other any minute. It may, if the city's good will and foresight extend sufficiently far, remain permanently as a monument. For the moment, however, despite registry, it's in some danger. An early concrete-arch bridge in suburban Rocky River is on the NR, and the latest nomination is the brewery of C Schmidt & Sons. Built in 1917 as its factory by Peerless Automobile Co (architect J Milton Dyer), they converted it to a brewery during the depression ("American" label). Later it became Carling's; was sold to Schmidt's in 1971. The showroom and original offices have been preserved throughout the plant's history. *AM*.

D PICKING & CO, Bucyrus, Ohio, has been nominated to the NR. It is today, as originally, a hand-hammered copper-kettle factory—one of the world's few. The present physical plant is exactly as when built in 1874—in fact, the only major changes made were installation of telephone & electric service.

KISTER MILL, Millbrook, Ohio, was added to the NR in 1974. It is unique in Ohio, being the last remaining milling enterprise operated by waterwheel. Building, equipment, and site are in excellent condition. The Kisters bought the site, a fulling mill, c1850, converting it to a grist mill. In 1894 the structure was dismantled and rebuilt using the same materials. It has continued as a practical, working sawmill, grist mill, and cider press. *AM*.

THE BRIDGE DOCTOR

Milton Graton of Ashland, NH, the US's only professional builder and restorer of covered bridges, is operating presently on what he refers to as the sickest bridge he has attended: the Bedell Bridge over the Conn R between Haverill Corner, NH and S Newbury, VT (Blt 1866, 396 ft in 3 spans), severely damaged in a 1973 flood. Unable to erect falsework in the river, Graton has supported the spans temporarily with cables running over cribbing towers at the abutments and piers and under crib struts at mid-spans. The funds for the job have been raised by the *ad hoc* Beddell Covered Bridge, Inc. Graton's work is backlogged five years.

COOPER—CORLISS PRESERVED



Pride of the Free State. Sauk Trail Line's C & G Cooper Corliss engine in its 2nd incarnation, at Acme Box Co, Baltimore (1954 photo).

In 1897 the C & G Cooper Co shipped from its factory at Mt Vernon, Ohio a 14" & 26" X 36" left-hand tandem-compound Corliss engine to the Magee Furnace Co, Chelsea, Mass. About 1922 the engine was sold to the Acme Box Co, Baltimore, where it powered two floors of specialized wood-working machinery via line-shaft-&-belt drive. In 1957 its useful days were ended and it sat gathering sawdust for another 15 years, when Acme donated the engine to the Sauk Trail Line Steam & Railway Historical Assn [SIA], Monee, Ill.

Because of Sauk Trail's commitment of funds to other projects, it was agreed from the beginning that the engine could be accepted only with free loading, shipping, and unloading. The 685th Army (Reserve) Transportation Co of East Chicago, Indiana agreed to unload the engine in Chicago and also arranged for a sister company in Baltimore, the 313th Transportation Battalion, to assist in dismantling and loading for shipment. The Baltimore & Ohio RR provided a gondola car for cost-free shipment.

In the fall of 1972 the engine was disassembled into its principal elements—the two cylinders being moved as a unit; the 9-foot flywheel in two halves—and moved to its new home, stored for the time. *DK*.

[A large cross-compound Cooper Corliss is preserved at Carillon Park, Dayton, Ohio. *ed*.]

IRON MANUFACTURE IN THE ADIRONDACKS

The Adirondac Ironworks Historic District, c15 miles NE of Newcomb, Essex Co, N.Y., has been recommended for inclusion on the Natl Register by the N.Y. State Divn for Historic Preservation. Through Doris Manley [SIA] of the DHP, the Natl Lead Corp invited an inspection and survey of the site, on the property of its Titanium Pigment Divn, to recommend possible historical use. Victor Rolando [SIA] visited the site, camping within the shadow of the 1854 MacIntyre Furnace over a weekend last July. He photographed and inventoried as much of the area as permitted by the intense undergrowth and intermittent rains.

Located were the remains of c1840 wooden blowing tubs, wood-headed pistons, misc castings, and the in-place remains of a 4-cylinder, water-powered blast engine for the 1854 furnace. Strewn throughout the mile-square area were rods, gears, wheels, linkages, plates, &c.

Rolando's recommendations, with Natl Lead's approval and Manley's work in Albany, resulted in the State's recognition of the site. NL has further offered to partially subsidize a student to spend the 1975 summer completing a more detailed survey and mapping of the site. Rolando further hopes to see the blast machinery identified, collected, and reassembled under a roof, and the District turned over to a trust. In addition to the furnaces and machinery, the District also includes the abandoned Village of Adirondac, ore pits, coal pits, and a mass of unidentified ironworks artifacts. *VR*.

EVENTS

Restoration of Historic Concrete Structures Symposium, 9-10 April, Boston. Part of the annual meeting of the American Concrete Inst, with joint sponsorship by Assn for Preservation Technology, Natl Park Service, and the Natl Trust. To develop an understanding of the problems shared by preservationists and concrete technologists. Papers on the early development & use of concrete, and evaluation of concrete properties as related to restoration. Presentation of specific concrete restoration problems, solved & unsolved. Information on attending/participating: Lee H Nelson, Office of Archeology & Historic Preservation, Natl Park Service, Wash, DC 20240.

Mt Washington Alternative Vehicle Regatta—1975. 15-20 June. "A tough & demanding contest for amateur & professional builders of prototype/production engine-driven alternative vehicles . . . trophy for most favorable efficiency, integrity & low resource consumption." Inertia? Fuel cell? Compressed air? Electric? Thermic? Springs? Wind? The old & the new sources. Rules, application, bulletins, &c: \$2. Mt Washington Trophy, PO Box 634, S Windsor, CT 06074.

4th Annual Cast Iron Lecture (Friends of C-I Architecture): Stephen Barod, Salt Lake City, on restoration projects in SLC & Wilmington, Del. 6 March, 7:00 PM, 20 W 53rd St, NYC.

Portsmouth (N.H.-Me.) Naval Shipyard: Dedication as a Natl Historic Mechanical Engineering Landmark. 11:00 AM 22 March. Tickets, information: Richard A Griffin, 875 Washington Rd, Rye, NH 03870.

Contributors to this issue: E M Bruton, Alyse Miller, NMHT; David Krall, STLS&RHA; Dianne Newell, Ontario Heritage Fdn; Victor Rolando, Nassau, NY; Philip Spiess, Natl Trust.

Shameful blunder. We reported last issue, right on the front page, that the Eads Bridge, St Louis, was the first rail crossing of the Mississippi (1874). We wish we hadn't. *Any* fool knows that it was the Chicago & Rock Island RR's timber span between Rock Island, Ill. & Davenport, Iowa, opened 1853, as pointed out by several readers. Eads Bridge was, however, the first crossing *below the Missouri*, whose flow makes of the Mississippi a considerably greater river than it is above.

COMMUNICATING

Oral History

Morris Canal. James Lee [SIA], Stewartville, N.J., exhumed of the Scotch turbine that powered (inclined) Plane 9 West of the Morris Canal [SIAN 2:1:2] and for 30 years historian of the former trans-N.J. waterway, has been awarded \$1400 by the N.J. Historical Commn to conduct an oral history project on the Canal. As the Canal operated until 1924, there still are people around who operated the boats and locks and were otherwise associated with it, who will be interviewed by Lee. He will record their recollections of life and work along the Canal, including stories, songs and general lore. [See notes on Lee's *Photographic History of the Morris Canal*, SIAN 2:4:5 & 3:3:5 and photos of the Plane 9 turbine, below] *NJHC Newsletter, Dec.*

Railroading. The Ry & Locomotive Historical Society has launched an ambitious, well organized oral history project under the direction of William L Withun (Rm 110, Grad School of Business, Cornell Univ, Ithaca, NY 14853). The goal is to record how people feel about their work, their fellow employees, and the industry they serve—the human and personal side of railroading. Interviews are planned with engineers and other operating and maintenance personnel, and administrative and corporate staff and officials. Alan Lomax, noted folk historian, has joined the project. Assistance from any quarter is sought. A descriptive newsletter on the project is available, above address.

Films—Industry & Pre-industry

Textiles. "Woven By Hand." Shot mostly in a Macclesfield mill where silk ties still are hand woven on wood-framed Jacquard looms. Scenes also in Dept of Textile Technology, Univ of Manchester, explaining basic weaving principles on hand looms: flying shuttle; pattern & Jacquard weaving. 16 mm, color, sound, 12 minutes. \$152 delivered in NA. North Western Museum of Sci & Indus, 97 Grosvenor St, Manchester M1 7HF, England.

Barrels. "The Cooper's Craft." A true film classic, made at Colonial Williamsburg c1967, of their resident cooper producing an oak "wet" cask, from the tree. Superbly presented. 16 mm color, sound, 39 minutes. \$345; rental, \$12 + post. Avail also as a 35-mm, 39-frame filmstrip, \$8 PP. Teacher's manual with all. Flyer & application avail. AV Section, Colonial Williamsburg Fndn, Box C, Williamsburg, VA 23185.

Volcano, W Va, site of the last operating endless-wire oilfield pumping system, natural-gas-engine powered, working since 1900. All this video-taped in 1972. 15-minute video cassette, \$22. Put on your cassette: \$2. Emory L Kemp, Dept of Civil Engineering, West Virginia Univ, Morgantown 26506.

Civil Engineering. The American Society of Civil Engineers has prepared a 24-minute slide film on its 40 designated Natl Historic CE Landmarks: bridges; tunnels; RRs; dams; &c. 140 35-mm slides; cassette tape of music & narration; written script: \$95; \$75 to ASCE members. 10-day preview \$25, applicable to purchase. ASCE, 345 E 47th St, NYC 10017.

LESSER-KNOWN MUSEUMS

The American Victorian Museum recently opened in the century-old Miners' Foundry, Nevada City, Calif. The firm formerly manufactured hydraulic and mining equipment, and there was first built the notable Pelton turbine or wheel. Among the museum's exhibits are a large collection of patterns from the foundry, cranes, ore cars, and other period mining equipment. The adaptive preservation of the Miners' Foundry will celebrate an era in which it was the hub of industrial Nevada County. Nevada City itself is a product of the Gold Rush, and other preservation efforts also are in progress there.

The purpose of AVM's founders, David S Osborn and Charles F Woods, is to encourage appreciation of local heritage through a recreation of Victorian arts, crafts, popular culture, and industry, and thus "to help modern man discover his identity." A non-profit educational instn, the museum is open 10-4, Fri-Mon; or by appt. Membership is open. Box 328, 95959.

Cincinnati Milacron Corp Museum [formerly Cincinnati Milling Machine Co]. The world's largest machine tool manufacturer has reconstructed on the top floor of its headquarters building a replica of its original 1884 plant (then Cincinnati Screw & Tap Co), complete with original machinery. It is entered through a reproduction of the facade of one of the city's early RR depts. 4701 Marburg Ave, Oakley, Cincinnati, OH 45209. PS.

Gray History of Wireless Museum. A collection of early wireless and radio transmitting & receiving equipment, originally brought together by G J Gray for the Greater Cincinnati Amateur Radio Assn, *Mike & Key Magazine*, and the Antique Wireless Assn. Church & Frank Sts, Mason, OH 45040. (Catalog avail: G J Gray, *Bits of Wireless History from Gray History of Wireless Museum*. 1969. 60 pp, illus. \$2.25 PP from J H Bruning, 6307 Fairhurst Ave, Cinn, OH 45213. PS.

The Plidco Pipe Line Museum, opened in 1971, is devoted to the history of pipeline development. Housed in a 100-year-old converted stable on the banks of the Cuyahoga River, Cleveland, Ohio, the museum is sponsored by the Pipe Line Development Co next door, whose chairman, Joseph B Smith, is the museum's founder, curator, and guiding spirit. The museum informs visitors of pipe line methods starting in 4000 BC, when the Chinese used bamboo as tubing for well casings and natural gas distribution. There is more recent history: wooden pipes used in 1857 to distribute coal gas to customers; two pumps used in a flood control system of the 1880s retrieved from a mud bank on the Ohio River. Smith is seeking specimens from antiquity & is contacting every oil & gas producing company in the world. 1831 Columbus Rd, 44113. (216) 696-7055. 9-4 M-F.

SITES & STRUCTURES

More on the Trillium [SIAN 3:6:6]—Nice article and sketch in *Compressed Air Magazine*, January, p 14. (CAM, which frequently carries historical articles, is available gratis: 942 Memorial Pkwy, Phillipsburg, NJ 08865.)



A feature of the Sept SIA Lehigh Valley Tour was a visit to the house of James Lee, formerly that of a Morris Canal plane tender, and access to the wheelpit housing the Scotch turbine that powered the plane [see "Oral History" above]. Left: the turbine from the ground surface, above. Center: the tangential spout of one arm. Right: the turbine seen from the tailrace tunnel (the vertical turbine shaft is missing). The water entered the turbine from below, through the pedestal.



ADD, Inc Photograph by Calvin D Campbell.

The Garage in Harvard Sq, Cambridge, MA. It was built 1860 as a horse-car stable and car barn; in 1916 it was converted to a 2-level parking garage by flattening the roof and building a concrete structure inside with the needed ramps; in 1924 it was enlarged by an addition containing the ramps, the ramps were removed from the original building, and it was raised a story. The third major alteration and second adaptive use has now occurred, in conversion of the structure by achts ADD, Inc, to a shopping complex. ADD partner Wilson Pollock [SIA] where possible kept the building's original fabric intact. Most of the ramps remain as pedestrian ways and windows that have been bricked up were reopened. 1st floor shops and restaurants have street frontage and some access to a through arcade; the 2nd floor is an essentially open "bazaar" with small shops divided by low partitions; and several nightclubs occupy an added top story.

Emerson Sawmill in Limbo. On the banks of the Schroon River in Warrensburgh, NY, this magnificent water-powered mill awaits either restoration or demise. By local tradition, it dates from 1818. [This claim is, however, doubtful; while a mill probably has occupied the site from 1818, the present structure is more characteristic of the late 19thC.] In operation until 1968, the mill since then has stood unoccupied, its machinery intact "as if the workers went home for the evening and never came back." While time and weather have taken their inevitable toll, the full beauty of the structure and its setting is unimpaired. Adjacent to the mill, its timber & stone dam curves gracefully across the Schroon.



Residents have rallied to the mill's preservation, and the Natl Trust, recognizing its importance, has pledged \$400 toward consultant planning fees. A local fund raising effort this fall netted \$4,000. Much more is needed, however. Purchase of the structure would, alone, cost c\$7,500; restoration an additional \$75-100,000. The restored mill would be put to an appropriate public use: for example, demonstration of now defunct lumber processing techniques.

But plainly the next step is to find funds with which to save the sagging, stately Star of the Schroon. Ideas and offers of financial assistance are welcome: Jean Frulla, Warrensburgh Historical Soc, 2 Sanford St 12885. *EMB.*

The World's First Factory? *Country Life* (28 Nov p 1675) describes a new industrial museum opened last November on an island in the Derwent at Derby, in the English Midlands, on the site of a silk mill built 1702 by Thomas Cotchett. As this apparently was the first time that (water) power was applied to drive a series of complicated machines, employing a regular force of skilled operatives, all under one roof, it generally is regarded the first "factory" in the world. The mill was greatly expanded in 1717, and over the next century became a notable tourist attraction. Not everyone found it an unmixed delight, however. One visitor recorded that he was overcome by "heats and stinks," and left in haste.

The silk industry in Derby collapsed about 1870; part of the structure of the original mill literally collapsed about 20 years later; and part was destroyed by fire in 1910. The bell tower, however, has been rebuilt with some of the original bricks, and some of the original foundation arches still can be seen, along with the original bridge and gateposts. But what the museum actually displays unfortunately is not revealed by *CL*.

Charcoal. What little real charcoal is made today (as opposed to briquettes) is burned not in the archaic earth-covered heap or mound but generally in brick beehive kilns structurally similar to brick kilns. The Pioneer Charcoal Co, Romeo, Florida operates 8 of these, producing their "Sparky" brand old-fashioned lump charcoal.



Beehive charcoal kilns, Romeo, Florida. R L Johnson photograph.

Mine Wasteland Becoming Community Asset

A new year-round recreational complex known as "Wildwood Highlands," located within 12 miles of center Pittsburgh, demonstrates what can be done to restore areas blighted by decades of intensive mining operations. The complex provides facilities for skiing, snowmobiling, indoor and outdoor riding and tennis, swimming, and a supper club, and will also contain a nine-hole golf course and overnight guest facilities. The project is a privately financed business venture associated with a townhouse community surrounding it. Two of the original structures on the site, the machinery service building and the mine office, were retained and converted to a well-appointed stable and a headquarters building. This development may well become a model for government and commercial reclamation of wasteland created by mining operations.

The Bad News

The 81-year old Illinois Central RR Station tower, Chicago, raged against its destroyers awhile as wrecking crews' efforts last Sept to topple it with a crane came to nought. The bad guys won, however, when The Ball was put to work on this sorry task.

Night has fallen on the 70-year-old Baltimore Gas & Electric Co's Pratt Street Steam Station, built as a trolley car power plant. No longer up to meeting the city's power needs, the station was abandoned in 1973. Soon—along with many of its harborside neighbors—it will be consigned to oblivion.



Cable-car sheave, recently unearthed in Paca St, Baltimore [SIAN 3:6:7], preserved at the Baltimore Trolley Museum. H H Harwood.

IA IN ART



The 150th anniversary of the commencement of the celebrated Welland Canal linking lakes Ontario & Erie near Niagara, inspired a 1st-class-rate stamp issue in honor of the canal's prime mover-entrepreneur-politician William Hamilton Merritt (1793-1862). The stamp features a portrait (c1860) of Merritt, after an oil painting by Robert Whale (1805-1887). In the background is a view of Lock No 23 at Thorold, Ontario—a steel-engraved interpretation of an original wood engraving executed by Schull & Hogan for *Picturesque Canada*, by George M Grant, 1882 (above). *DN*.

Avail: Philatelic Service, Canada Post Office, Ottawa, ONT K1A 0B5.

Footnote: On 29 Nov 1974, the day of the stamp's issuance, the Hon Judd Buchanan, Minister of Indian Affairs & Northern Development, at Lock No 3 of the Welland Canal, St Catharines, Ontario, unveiled a Historic Sites & Monuments Board of Canada plaque commemorating Merritt.

• • • • •

More IA in Art. Richard M Candee [SIA], *The Early New England Textile Village in Art*. In *Antiques*, Dec 1970, pp 910-15.

MISC NOTES

HAER Summer Surveys. Student architects; engineers; historians needed for variety of projects—all interesting, all in IA. Application & information: HAER, Natl Park Service, Washington, DC 20240. Deadline 15 March. Don't linger.

Hagley Internships for Aug 1975-July 1976 (4). To participate in all aspects of museum program, research, &c; in 19thC industry. Application, information: Coordinator, Hagley Program, Greenville, Wilmington, DE 19807.

Dennis J Connors, formerly on the staff of the Landmarks Society of Western NY, has been appointed Executive Director, Landmarks Assn of Central NY, Syracuse.

Donald E Marlowe, Chairman of the ASME History & Heritage Committee, has resigned as VP for Administration, Catholic Univ, to accept Executive Directorship of the American Society for Engineering Education, Washington.

Field Project: Extensive magnetite iron mines nr Dover, NJ. In use 18thC-recently; most active 1865-1910. Rapidly being encroached upon by civilization; remains above/below ground. Information: Kenneth R Hanson, 1973 Wood Rd, Scotch Plains, NJ 07076.

Steam engine models, exquisitely detailed, 1-off, 1860-now. Catalog \$1. Field & Co, Box 433, Mamaroneck, NY 10543.

Research Inquiries

The Ohio Bridge Co, operating in Cleveland 1870-73. Archival data sought on firm and its principals: Wm B Rezner, Frank D Stone & John Outhwaite. William Chamberlin, 1046 Shave Ct, Schenectady, NY 12303.

Briarcliff Manor & Hawthorne (NY) stations, NYCRR. Historical & physical information; photos sought. Julian Cavalier, 3600 Laddie Crescent, Malton, Ont L4T 1N1.

Industrial Inclines. Once numerous for conveying bulk materials up & down slopes, now nearly extinct at the hand of conveyors and trucks. Information sought on operating systems and remnants, including photos and data of former ones. Original photos copied & returned promptly. R L Johnson, Whistles in the Woods, Rt 2 Box 265-A, Rossville, GA 30741.



White Silica Sand Co incline, Lake City, Tenn., still in operation bringing sand from mountain-top pit to cleaning plant below. Operates on the balanced system with passing sidings at mid-flight. *R L Johnson photograph.*

SIA AFFAIRS

Taxes. As noted each year at this time, your SIA dues are deductible (in the US) if you work at IA in some way, as a job expense. If you are one of our esteemed *Contributing Members*, however, you may deduct at least \$10, as a donation to a non-profit organization; all \$25 if you work at IA.

Abvrns. What can we say? When, with the membership hovering around 600 something like 575 comments are received deploring excessive abbreviation in the SIAN, it gradually dawns that there exists widespread hostility toward the practice. The reason for the policy is well known: nothing more than an attempt to bring you as much information as can humanly be packed into these pages, only, apparently it has turned somewhat inhuman. Donald Ramsey of Takoma Park, M-a-r-y-l-a-n-d, for one, has written on the "abomination" of denoting state names in text by the new two-letter symbols. That's what we get for trying to be so very now. He's right, though. Henceforth, states & provinces in *text*, spelled out if short; the *Old Style* abvrns, if long. (This all having taken roughly 10 times the collective space saved by every abrvn in this whole issue.)

Alert! Within the next few weeks, if not sooner, there will go out a mailing containing the long-awaited new Membership Directory; a list of IA & related courses; and other matter. To save postage, it will travel 3rd class. Because of the vagaries of this service, we ask you to be alert for receipt. If there is none within a reasonable time, please notify.

Policy changes. You will by now be aware that the proposal to increase dues passed by an overwhelming majority, and is in effect with the 1975 dues year. Please recall—this was not a simple increase, but was to fund publication of *IA*, the Society's new journal, the first issue of which is due in early spring; semi-annually thereafter, it is hoped.

The amendment to Constitution Article VII also passed. A paste-over with the new language will be included with the above mailing or herewith.

<i>A Summary of the vote</i>	<i>yes</i>	<i>no</i>	<i>abstain</i>
Dues increase	194	31	1
Article VII Amendment	217	5	4

Nominations. Suggestions for the slate of officers (VP, Secy, Treas) and board members to be elected at the Annual Conference (Baltimore—25-27 April), may be submitted to Dianne Newell, Nominating Comm Chrn, 93 Parkside Dr, Toronto, ONT M6R 2Y8. The slate will be announced in SIAN 4:2, out late Mar.

PUBLICATIONS OF INTEREST

Harold A Barry et al, **Before Our Time—A Pictorial Memoir of Brattleboro, Vermont from 1830 to 1930**. Brattleboro: Stephen Greene Press, 1974. 160 pp, map. \$7.95. Wonderful views of the city's life, including many mills, factories, RRs, bridges, and a section on the Estey Organ Co. First rate.

James P Baughman (ed & Introd by), **The History of American Management—Selections from the Business History Review**. Englewood Cliffs, NJ: Prentice-Hall. 264 pp. \$5.95. Covers 1850-1950.

Charles F Carroll, **The Timber Economy of Puritan New England**. Providence: Brown Univ Press, 1973, 221 pp. \$12.50.

Stanley D Chapman, **The Textile Factory before Arkwright: a Typology of Factory Development**. In *Business History Review*, 1974, No 4, pp 451-78.

Daniel deNoyelles, **Brick Brands & Manufacturers of the Hudson River Valley & the Metropolitan N.Y.C. Market**. 1974. The author: 1 Pine Drive, Thiells, NY 10984. 12 pp. \$1.50 PP. Several hundred manufacturers' brand letters, of the thousands used, c1815-1950. A supplement to the Story of Brick (qv: SIAN 3:4:7). The pair: \$5. PP.

Francis D Donovan, **Grand Central Station & Its Predecessors**. In *Railway History Monograph*, Vol III No 4, Oct 1974, pp 65-75 + folding plates of reproduced elevations, sections and track plans. Bibliog. Brief history of the terminal, physical & operational. J-B Publ Co. 430 Ivy Ave, Crete, NB 68333. \$2. (\$6 annually; 4 issues).

Carlos Elmer, **London Bridge in Pictures**. The author, Box 875, Scottsdale, AZ 85252. 1973. 36 pp. \$1.50. Pamphlet heavily and nicely illus with contemporary images of the bridge in situ, incl many of its construction; and photos of its move and relocation in Arizona. Sure it's a grotesque idea, but it was saved.

Arthur H Frazier, **Water Current Meters in the Collections of the Natl Museum of History & Technology**. Wash: Smithsonian Instn Press, 1974. (From Supt of Documents, USGPO, Wash, D.C. 20402. Stock # 4701-00116. 95 pp. \$2.05.) Thorough history of flow measurement with section on the work at Lowell by New England's eminent early hydraulic engineers.

William Graebner, **Great Expectations: The Search for Order in Bituminous Coal, 1890-1917**. In *Business History Review*, 1974 No. 1, p 49.

Grant Hildebrand, **The Architecture of Albert Kahn**. Cambridge: MIT Press. 1974. Documents his career, from his 1st factory in 1903, through River Rouge beginning 1918, to his death in 1942. Factory design during and after his lifetime has been largely marked by his concepts. 99 illus: photos & dwgs. 224 pp. \$14.95.

John M Lamb [SIA], **Early Days on the Illinois & Michigan Canal**. In *Chicago History* (Chicago Historical Soc, Clark St & North Ave 60614), Winter 1974-75, pp 168-76.

Bruce A Lohof, **The Service Station in America: the Evolution of a Vernacular Form**. In *Industrial Archaeology*, Spring 1974, pp 1-13. With the Marathon Oil Co's stations as examples, traces stylistic and functional development, 1933-c1945, from your "Metal Portable Service Station" model, to your more sophisticated "Kettering," "Colonial," and "Alpine."

E Bryant Phillips, **Nebraska Street & Interurban Railways**. J-B Publ Co, Crete, NB 68333, 1974. 76 pp. \$3.75. Interesting articles on systems & individual lines. Illus.

Ian M G Quimby & Polly Anne Earl (eds), **Technological Innovation & the Decorative Arts: Winterthur Conference Report 1973**. Univ Press of VA, Box 3608 Univ Station, Charlottesville 22903. 12 monographs on the decorative arts in the 19th C and the technology behind them. 287 pp. \$4.50 paper.

Henry Hope Reed, **A Primer on Walking Tours**. In *Museum News*, Nov 1974, pp 20-23. (Amer Assn of Museums, 2233 Wisconsin Ave NW, Wash, DC 20007. \$1.75). How to run them—good PR and fund raisers. Illus of 3 SIA Annual Conf field trips.

A J H Richardson, **Indications for Research in the History of Wood Processing Technology**. Comprises the bulk of Assn for Preservation Technology Bulletin No 3, 1974, pp 35-146. In three parts: 1) The Setting: A great World of Wood Now Disappeared; 2) A First Selection of Documents on the Details of Wood-Processing in Eastern Canada, 1795-1855; 3) Some Highlights of the Second Half of the Century. Thorough, well illus overview of an industry that only recently has started to attract the historical attention it badly needs. (Details on APT: Meredith Sykes, Box 2682, Ottawa 4, Ont.)

E Alfred Seibel, **Electricity & the Elevated**. In *Natl Ry Historical Society Bulletin*, 1974, No 3, pp 6-12; 46-7. Illus. Electrification of the N.Y.C. els, 1901-03.

Kalus H Wolff, **Textile Bleaching & the Birth of the Chemical Industry**. In *Business History Review*, 1974, No 2, p 143.

The Making, Shaping & Treating of Steel. US Steel Corp, Pittsburgh, PA, 9th edn, 1971. 1420 pp. \$25 (students \$15) + sales tax. 1st publ 1920. A very bible of the processes, chemistry, and equipment of the entire industry, including many of its ancillary aspects; from ore mining to finished products. Heavily illus, bibliogs, index. Considerable attention throughout to historical precedents.

Zinc, A Mine to Market Outline. Zinc Institute, 292 Madison Av, NYC 10017. Outline of mining, processing & smelting, and uses. 88 pp. Gratis. (12 pp publs & films list)

George E Condon, **Stars in the Water**. Doubleday. 338 pp. \$9.95. Latest on the Erie Canal (review: *Time*, 8 April)

Helen B Crocker, **Steamboats of Kentucky's Green River**. In *Antiques*, Mar, pp 570-75. Good illus & descr of the wharves, steamers and locks on the canalized (1834-42) Green.

Floyd R Dain, **The Michigan Central RR & the Michigan Mayflower**. In *Detroit in Perspective*, autumn 1973, pp 45-65, illus. The luxurious sidewheeler (1849) and rail connections between Buffalo and Detroit, incl depot.

A E Durrant, **The Mallet Locomotive**. David & Charles. \$9. 5000 built; 3000 in the US.

Brother C Edward, **Eli Whitney: Embattled Inventor**. In *American History Illus*, Winter 1973, 8 pp.

John A Eisterhold, **Savannah: Lumber Center of the S Atlantic**. In *Georgia Hist Quarterly*, Winter 1973, pp 526-43.

John D Ellingsen, **Ghost Towns in Montana**. In *Historic Preservation*, Jan-Mar, pp 24-27. The problems and successes of ghost-town preservation.

James E Fell, Jr, **Nathaniel P Hill: A Scientist-Entrepreneur in Colorado, Arizona, and the West**. In *Quart Journal of Hist*, Univ of Arizona, Winter 1973, pp 314-332. Illus. Hill (1832-1900), an easterner, through innovative smelting technology is credited with reviving and vitalizing the late 19thC western metals indust.

William H Shank, **Indian Trails to Super Highways**. American Canal & Transportation Center, 809 Rathton Rd, York, PA 17403. 68 pp, illus. \$3.50 (+ .21 for PA).

G R Stevens, **History of the Canadian National Railways**. NY: Macmillan, 1973. 538 pp. \$12.95. A fine, definitive history.

John H White, Jr, **Richmond Locomotive Builders**. In *RR History*, Spring, pp 68-99. The group of small ones that conglomerated to become ALCO's Richmond Works.

Those Were The Days. In *Idaho Yesterdays* (ID Hist Soc) Summer 1973, pp 16-23. Photographic essay on turn-of-century photographer, C E Bisbee, and his record of the construction of and 20-year life in Twin Falls, incl RR structures, dam, and bridge const.

SPECIAL PUBLICATIONS & REPRINTS

Herbert W Ferris (comp & ed), *Historical Record, Dimensions & Properties, Rolled Shapes: Steel & Wrought Iron Beams & Columns, USA, 1873-1952*. American Inst of Steel Construction, 1221 Ave of the Americas, NYC 10020. 141 pp. \$7 (4-6 week delivery). Tabulation of all sections rolled by about 20 mills, drawn from their catalogs. Useful in restoration & adaptation work.

Henry Hall, *The Ice Industry of the U.S., with a Brief Sketch of its History*. In *10th Census of the U.S.* (1880) Vol 22. Reprinted by Early American Industries Assn, 11 Scottsdale Rd, S Burlington, VT 05401. 42 pp. \$5. Splendid view of the industry just prior to its zenith. Woodcuts of large commercial ice houses & harvesting, tools, &c. Tables.

Mitchell's 1835 *Compendium of Canals & Railroads*. Directory of all projects completed & underway in the U.S. & Canada. Tables, descriptions, &c. 84 pp. Reprinted by American Canal & Transp Center, 809 Rathton Rd, York, PA 17403. \$1.95 PP; \$2.07 in PA.

Amoskeag Steam Fire Engines & Hose Carriages Mfgd by the Manchester Locomotive Works. Reprint of 1895 catalog. 45 pp, 12 illus incl view of the works. Contains register of all Amoskeag steam pumpers from No 1 (1859) to 713 (1894). Manchester Historic Assn, 129 Amherst St, Manchester, NH 03104. \$2.20 PP (25% off for 10 or more).

Prints of 19thC Manchester, N.H. (seat of the famed Amoskeag and other textile mills). Set of 4 includes 1847 view of city; view of Stark Mills yard, showing mills & housing. \$5.50 each, PP. Flyer avail: MHA, as above.

A Guide to Federal Programs: Programs & Activities Related to Historic Preservation. Compiled by the National Trust, 748 Jackson Pl NW, Wash, DC 20006. \$8.

Early American Iron Making, special issue of *Northeast Historical Archaeology*, semi-annual journal, Council for NE Hist Arch'y. \$3. Gil Hagerty, 12 Coolidge Av, Glens Falls, NY 12801.

Conservation in the Context of Change: Building Types Study 469. Special section in *Architectural Record*, Dec. 1974, pp 85-136. Deals with, inter alia, adaptive use of two warehouses in San Francisco, the Garage (article above), and Boston's Long Wharf; and "endangered" buildings, including several RR stations.

U.S. Railroad Map, 19" X 31". From Union Pacific Rys, Advertising Dept. 1416 Dodge St. Omaha, NB 68102. Gratis. *Business History Review*. The following books were reviewed in BHR, 1974. () = issue no.

John Dierdorff, *How Edison's Lamp Helped Light the West*. (1)

William L Downard, *The Cincinnati Brewing Industry: A Social & Economic History*. (2)

Colin Fraser, *Tractor Pioneer: the Life of Harry Ferguson* (reviewed by Eugene S Ferguson [SIA]). (4)

Grace Goulder, *John D Rockefeller: the Cleveland Years*. (4)

Lawrence R Gustin, *Billy Durant, Creator of General Motors*. (3)

John F C Harrison *The Birth & Growth of Industrial England, 1714-1867*. (4)

Graham Hood, *Bonnin & Morris of Philadelphia: the First American Porcelain Factory, 1770-72*. (1)

Anne Jardim *The First Henry Ford: a Study in Personality & Business Leadership*. (4)

Ward McAfee, *California's Railroad Era, 1850-1911*. (4)

William Partridge, *A Practical Treatise on Dying of Woollen, Cotton, & Skein Silk with the Manufacture of Broadcloth & Cassimere, Including the Most Improved Methods in the West of England*. Orig publ NY 1823; reissued with introd & notes. (4)

IA PhD Dissertations [see SIAN 3:6:10 for availability]:

Antoinette J Lee [SIA], *The Rise of the Cast-Iron District in Philadelphia*. George Washington Univ, 1975 (avail spring, 1975).

Peter H Smith [SIA], *The IA of the Wood Wheel Industry in America*. George Washington Univ, 1971.

Review

J P M Pannell (J Kenneth Major [SIA], ed), *The Techniques of Industrial Archaeology*, 2nd edn. David & Charles, N Pomfret, VT 05053, 1974. 200 pp; line & half-tone illus. \$9.95 US; c\$14 Canada.

As in the 1st edition (1966), the book presents a rather complete discussion of many elementary researching, surveying, drawing, and photographing methods, done with inexpensive tools. While Pannell's intent is to offer a practical guide on the best approach for the enthusiastic IA worker, he has omitted reference to many of the more expensive or refined techniques available. With the emphasis on recording methods, many readers may be disappointed in the lack of information on techniques for preservation and utilization of surviving industrial works.

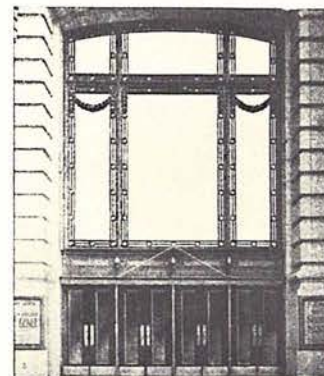
Contributions by Major to the 2nd edition help round out Pannell's original ideas and update references to the [British] NRIM (Natl Record of Industrial Monuments). Major has also included useful sections on the scope of IA, a more comprehensive bibliography, and a list of UK museums. Regrettably, the illustrations are not strong, and the printing quality of the 2nd edition appears less sharp than in the original. Major would have done well to take the advice given by Pannell, by emulating the superior workmanship displayed in the old engineering drawings, stored away in the plan room of some long established company. *D L Bouse, Ottawa.*

Letters

Editor:

Your statement in SIAN 3:6 that the cast iron industry was "finished" by the end of WW I prompts the following response: The Samuel J Creswell Iron Works of Philadelphia, originating in 1835, manufactured a wide range of cast-iron products until the early 1950s when a fire swept through their buildings on Comly St in the NE part of the city. The foundry still exists in name but does not produce cast iron. The impression that the manufacture of cast iron has long been a lost industry discourages attempts to replace missing pieces of iron front buildings, most notably the stolen parts of the Laing Stores [SIAN 3:4]. For the upcoming Friends of Cast Iron Architecture annual lecture, I believe Margot Gayle is inviting an architect who secured replacement parts in the restoration of a cast iron facade. *Antionette J Lee, Alexandria, VA.*

Ms Lee Has just completed a PhD dissertation: "The Rise of the Cast Iron District in Philadelphia" (see Publications). With her letter she sends copies of several pages from Creswell's 1944 (!) catalog illustrating such cast-iron products as "fronts for buildings, stable fixtures, vault lights, &c," which, coupled with the cut therefrom reproduced here, leads to the suspicion that the catalog actually is at least 30 years earlier with the date changed. Ed.



CAST IRON FRONT