



SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

Volume 9 Number 1

January 1980

END OF THE LINE FOR DODGE MAIN



Aerial view (c. 1960) of Dodge Main. Forster Studio photograph, courtesy of Albert Kahn Assoc., Architects and Engineers, Detroit, Michigan.

On Fri., Jan. 4, Chrysler Corp. closed its "Dodge Main" Assembly Plant in Hamtramck, Mich., laying off 5,000 hourly workers. The company offered the usual argument that the vintage multi-story complex was too inefficient to meet the requirements of the modern automobile industry. Given the state of the American auto industry, and Chrysler Corp. in particular, the plant probably will not produce automobiles again and likely faces demolition. The boys with the wrecking balls will have fun because most of the complex's six million square feet of floorspace are encased in reinforced "Kahncrete" buildings from four to eight stories high.

John F. and Horace E. Dodge were among the original stockholders in the Ford Motor Co. in 1903, and were Henry Ford's most important parts suppliers (transmissions and engines) during his early years. As Ford grew and prospered, so did the Dodge Bros. Corp., requiring a move to larger quarters. They built an engine plant in Hamtramck (adjacent to Detroit) in 1910, but after several feuds with Ford began producing their own Dodge automobile in 1914. It proved an immediate success. By 1917, they had over 15,000 employees at the Hamtramck plant, which included stamping, transmission, and assembly operations, as well as a foundry. Chrysler, which acquired the Dodge properties in 1928, gradually phased out manufacturing operations at Dodge Main. By the early 1960s, only assembly operations remained. Many of the other buildings were scrapped for parking lots.

Dodge Main played a vital role in the history of the United Auto Workers. It was the first major plant they organized (1936), and U.A.W. Local No. 3, with 26,000 members in 1937, was reported to have been the largest union local in the country. Employment at Dodge Main peaked at about 40,000 during World War II.

Dodge Main, designed by Albert Kahn, was the second major automobile manufacturing complex to be built of concrete. (Ford's Highland Park Plant was first.) The four-story Assembly Plant (1914) is 1,100 ft. long and consists of several 60-ft. segments separated by open courts. The rest of the complex includes an office building (1915), a large eight-story concrete building added in 1917 for the assembly of howitzer components, and an enormous powerhouse built in 1920. Since most of the Highland Park plant has been demolished, this is the only surviving example of a massive multi-story concrete automobile plant from the 1910s, at least in the Detroit area. Naturally, it will be a tour stop during this spring's SIA Annual Conference in Detroit. C.K.H.

TROUBLE FOR INDUSTRIAL LANDMARKS

There is news on the legislative front that holds serious implications for the IA movement in the U.S. President Carter recently signed into law the 1980 Appropriations for the Dept. of the Interior. Of greatest interest to preservationists was the \$55 million appropriation for the National Historic Preservation Fund. Of grave concern to industrial archeologists, however, was an

NEW EDITORIAL ADDRESS

The bottom of this page to the contrary, *Newsletter* correspondence should now be directed to: Carol Poh Miller, Editor, SIAN, 1260 Granger Ave., Cleveland, O. 44107. (We are economizing by using up old (ie. pre-printed) stock.)

ominous "owner consent" provision in the bill that requires owner consent prior to the designation of industrial facilities as Natl. Historic Landmarks.

Rep. Joseph McDade (R-PA) led the fight in favor of the provision during House debate last Dec., according to *Preservation*

Action! Alert (Jan. 1980). The issue was sparked by Procter & Gamble's protest of the potential designation of its Ivorydale headquarters, located outside Cincinnati, without the corp.'s consent. McDade's fight was successful: potential industrial NHLs now must have their owners' blessings—the only category of NHLs to be so stymied.

WHENCE HAER, HITHER NAER

The last issue of SIAN included an editorial by Robert M. Vogel critical of current government plans to decentralize the Historic American Engineering Record (HAER), along with other Federal preservation agencies. There are other points of view. Here, T. Allan Comp, Acting Chief of HAER, responds to Vogel's remarks.

In last issue's editorial, Robert M. Vogel criticized the recently created National Architectural and Engineering Record, and forecast the demise of the Historic American Engineering Record. As Acting Chief of HAER, I wish to assure SIA members that the news of our demise is greatly exaggerated. While this may dismay some of our critics, the following comments, I hope, will set the record straight.

There are three major points made in the editorial. 1) The "very basis of the HAER mandate is being corrupted." 2) The "distinctive HAER identity . . . has been effectively lost." And, 3) the "vitality that springs from a strong central headquarters is about to be sapped." From this, the reader is led to assume that HAER's documentation function is being lost, that HAER will soon disappear, and that Washington, D.C., must continue to be the great central source from which all good IA will flow.

The last point is most quickly dispatched. The entire historic preservation office was shifted from the National Park Service to become a major part of the Heritage Conservation and Recreation Service (HCRS). It is indeed being regionalized. Neither Congress nor the American public seems anxious to see ever larger bureaucracies in Washington, D.C. Both are interested in the prompt and intelligent delivery of services financed by their tax dollars. By developing strong headquarters across the country, localities will be better served—more efficiently, more effectively, and with greater sensitivity to regional issues. With an emphasis on policy, planning, and budget in the D.C. office, the regional offices will concentrate on resource identification and preservation. These are the services we need to deliver if IA is to continue to prosper, and we will be in a better position to deliver these services with a staff in eight locations instead of one.

The SIA itself went through much the same debate when the board and the membership agonized over the consequences of establishing local chapters. While many feared the dilution of Washington, D.C.-based wisdom and direction, a great many more welcomed the chance to expand and grow. IA will survive only if it is able to extend its contact with people in every walk of life. Washington, D.C., has no monopoly on qualified, professional, or dedicated people. There are, in fact, many such folks all over the country, and lots of them don't want to work in Washington. The challenge is not to hold all the reins in Washington, but to get more good horses running all over this country.

Leaving program development aside for a moment, let me address the other two management questions raised—specifically, the merger of HABS and HAER and the dissolution of the HAER Advisory Board. From an administrative point of view, creating a single division for the two programs is rational, even in its formal sense. HABS and HAER evolved from common concerns, operate similarly in many areas, and share many functions. Far from being "bizarre," the NAER consolidation will eliminate duplication, allowing both programs to benefit more effectively from the larger disciplinary mix now directed by a single chief.

The advisory board issue is cloudy at best, but it is in no way the sophisticated conspiracy suggested in the editorial. In the midst of creating the new HCRS, the public law terminating all advisory

boards that did not apply for renewal went unnoticed. HCRS is now developing a new advisory board which will consult with the entire historic preservation office. It will contain separate subcommittees for both HABS and HAER, and will be required to meet at least once a year, thus assuring HAER the benefit of their consultation.

Beyond all these organizational issues, there is deep concern in the editorial for the corruption of HAER and (by extension) the entire field of industrial archeology in the U.S. According to Vogel, "good theater" is now replacing our usual "plodding" efforts, and HAER is entering "upon a rapid doctrinal and functional divergence." Given the tenor of his remarks, we may soon expect to see the industrial-archeological sky falling in!

Recent English and French publications by Kenneth Hudson and Theodore A. Sande indicate that HAER has achieved a distinguished international reputation for innovative and scholarly work in the field of IA. As a Federal office, HAER has been responsible for helping develop a national awareness of the significance of our industrial heritage, particularly among agencies using Federal money or licenses that might affect that heritage. We are proud of the historical records our documentation program has created and of the archival materials we have uncovered and made available to the public. By operating field projects, both inventory and recording, we have been able to multiply our capabilities well beyond the capacity of our small permanent staff.

I must take exception to the former Editor's claim that "the most noble of HAER productions are the elegant measured drawings." There is nobility in many of the historical reports, as well, and elegance in the work of our staff photographer. But HAER is not trying to generate pretty pictures. Rather it is engaged in a serious effort to create a complete and reliable archival record using every tool it can assemble. Our inventory cards are hardly photogenic (even though they are often photocopied), yet they are our most active contribution to the ongoing process of historic preservation. To single out a small part of that process is to denigrate the intellectual efforts involved in interdisciplinary, site-oriented documentation.

This interdisciplinary approach, and our success with it, created the rehab teams Vogel criticizes. By themselves, our documentation efforts have a limited effect on the resources and the historical consciousness they are, in part, intended to foster. Effective advocacy required expanding our traditional base of industrial archeologists and historians of technology. The HAER Rehab Action Team is one attempt, among several, to broaden both our constituency and our impact on the built environment. Just as a good museum creates the best setting for its exhibits, HAER wanted to find a better setting in which to advocate the preservation of historic industrial buildings. While a museum may have the option of creating good theater around its artifacts, HAER is dealing with real, often abandoned or underused, buildings in a real economic world. Far from taking time, energy, professional expertise, or money away from our documentation efforts, these projects increase HAER's archival collections and our staff resources. Each is funded outside the office, and each is required to fully inventory or record the site or sites as an integral part of the planning process. We feel this model demonstrates proper professional concern both for historic documentation and extended use.

Last summer, HAER fielded six rehab teams that stretched from

the Lehigh Canal in Pennsylvania, to the Georgetown Steam Plant in Seattle, Washington. We employed fifty-seven people on those teams, more if you count the CETA employees some cities provided, the volunteers, and the state and regional staffs who gave us much more time than they originally anticipated. The sites and results of those teams are described in the Spring, 1980 supplement to *11593*, the HCRS newsletter for historic preservation programs.

Some of the specific results bear mention here. Thirty-five of the fifty-seven employees were historians and architects primarily engaged in researching and writing, or measuring and drawing. The six rehab teams completed 951 HAER inventory cards, nearly 400 pages of historical reports, dozens of drawings, and exactly 563 record photographs, *all at no cost whatsoever to the HAER budget*. This significant documentation would not exist were it not for the rehab teams, and it will soon be transmitted to the Library of Congress. In addition, these historians and architects worked with the other 22 planners, archeologists, landscape architects, recreation planners, and economists to create a set of preservation options for each area we documented.

Because the thrust of the rehab teams is documentation *and* advocacy, these projects are able to bring the tools of historic preservation and an awareness of our industrial heritage to localities and individuals unfamiliar with both. Communities like Danville, Virginia, that once ignored—even disliked—its old tobacco district, have slowly recognized the importance of their own history and the opportunities for new and extended use it holds. Others, like Claremont, New Hampshire, knew they had something special but had no way of translating that recognition into a series of options for consideration by the whole community.

The editorial asserts that many of the sites included in the rehab team projects were “exceedingly fringy material.” I do not agree. Technology is a broad cultural influence in America, a dynamic that should not be limited by narrow definitions. There is no Chairman and no Red Book in industrial archeology and we are better for it. To argue HAER’s “doctrinal and functional divergence” is specious. Technology and industrial archeology are historical experiences that cut across lines of class and race as well as professional specialty. HAER’s responsibility is to the whole public, and it is to this democratic constituency that we address our efforts. For the inhabitants of an industrial town, or the descendants of millworkers, or students of social history, the entire working environment may be worth documenting and interpreting. The actual factory, of course, but also the workers’ housing, the pay office, and the outlet store are part of the industrial heritage. If these structures can be reused as well as recorded, they remain a part of the living heritage.

This “fringy” label is particularly narrow when applied to our efforts in Laguna, New Mexico. The Laguna Tribal Council, seeing a loss of historic structures on the reservation and a resulting decline in social cohesion, invited HAER to establish a rehab team at the pueblo. The request was unusual; HAER was being asked to transfer its methodology from abandoned or underused industrial buildings to traditional housing units in similar condition. The project was to be a single experiment, establishing a model for other pueblos, not for HAER. We did not assume, however, that Indian technologies or building crafts were insufficiently industrial to merit recording by HAER. We completed a project that included on-site recording of craft techniques and a chronological report documenting technological and architectural change over the past four centuries. The team then used this documentation as the basis of its rehabilitation plans for Laguna’s homes in the six villages on the reservation. The historical report focuses directly on the impact of technologies—ranging from the first railroad to a huge uranium mine—on this tribal culture and the remarkable, even instructive, resilience of these people.

The Laguna Project was funded entirely by the Bureau of Indian Affairs and included one staff member from the HCRS regional office in Albuquerque. The final report includes a comprehensive open space/recreation plan for the reservation, just as every rehab team we field includes technical expertise from the recreation component of HCRS. Our goal in all the rehab projects is to generate public interest and support for the preservation and use of

historic structures. Last summer, that meant suggesting the development of an old canal as a recreational trail, an abandoned day school as a community center, even a mine spoils pile as an important visual break between mining activity and an uptown business district. All of these studies used the complementary elements of recreation and preservation within HCRS and helped strengthen the possibilities of actual implementation. There are many agencies willing to assist in returning significant industrial sites to productive use. Our rehab teams work to locate and exploit these opportunities.

Virtually all of the people who created one of “the most cost-effective and valuable historical programs ever mounted by the U.S. Government” are still in their places and still determined to keep HAER in the forefront of historical documentation. Vogel’s references to “bureaucrats with low historical awareness quotients,” or “(mostly) dedicated professionals” are inaccurate. HAER maintains a highly professional staff, one I would be proud to match against any agency in this country for commitment, professionalism, and hard work. The office has come a long way in the past ten years, years that saw a tiny office become a leader in this country, years that saw a nascent perspective on industrial archeology become a comprehensive program both admired and imitated throughout the world. “Inadequate leadership” has never been a HAER failing.

Still, the cumulative impact this office has had on the resources and the people it seeks to serve is tiny, nowhere near a match for the real need. Rather than content ourselves with a past decade of accomplishment, HAER now looks forward to a new decade in which we will start again from a small base. But this time there will be eight bases instead of one, and we may just make eight times the difference we did in the last decade.

Success will depend on close working relationships with local chapters of the SIA, the active support of the national board, and the continued hard work and perceptive imagination of summer teams and the HAER staff. I believe we are working effectively toward making HAER a public institution dedicated to fostering an understanding of, and an appreciation for, our American industrial heritage. With the former administrative load now carried by NAER and the regional strength of HCRS, we can bring our interests down from the castle towers—be they ivy or ivory—directly to the American people whose working lives are so closely tied to the resources we strive to preserve.

Readers are invited to submit their own opinions on the issues raised by the Vogel/Comp commentaries. -Ed.

SAILING SHIP SINKS OFF CAPE COD

A sailing cargo ship, the nation’s first in 40 years, launched last summer from an old Maine boatyard into a presumed sea of opportunity created by the energy crisis, has sunk. The *John F. Leavitt* sank in Dec., 150 mi. S.E. of Cape Cod. She was on her first working voyage, carrying oversized lumber bound for Haiti. The *Leavitt*—named after the maritime scholar who wrote *In the Wake of the Coasting Schooner*—had left Quincy, Mass., 10 days before her call of distress during a storm.

The boat’s captain and builder, Ned Ackerman, had launched the vessel with great fanfare from Thomaston, Me., last August after three years of work. Ackerman modeled the 97-ft. vessel after 19th-c. prototypes. It had 6,440 sq. ft. of canvas sail rigged fore and aft from 80-ft. masts. Its only fuel requirement was a small amount of diesel oil needed for pumps, generators, and hydraulic cargo hoists. The boat had a cargo capacity of 150 tons.

The nine persons aboard the vessel, including a film crew reportedly preparing a documentary on the revival of sailing schooners, were rescued by Air National Guard helicopters from Long Island, N.Y.

SIA's NEW EDITOR



With the Nov. 1979 issue, Robert M. Vogel retired as Editor of the *SIA Newsletter*. Vogel, the *SIA*'s first (and until now, only) editor, gave eight important years of service to this task, shaping the *Newsletter* into a critical instrument that has both guided the path of the Society and spread the news of its aims and interests to a broad constituency. Under Vogel's direction, the *SIA* became one of the best newsletters in the field of historic preservation and the standard-bearer for the IA movement in North America.

With this issue, Carol Poh Miller assumes the post of editor. Miller, a historic preservation consultant in Cleveland, has been an *SIA* member since 1974. She holds a B.A. from Douglass College of Rutgers University and an M.A. in American Civilization from George Washington University. She has worked on a number of projects for the Historic American Engineering Record, including two summers (1978, 1979) as director of the Cleveland Recording Project. Last year, she conducted HAER's Great Lakes Lighthouse Survey along the shores of Lake Erie and Lake Ontario. An adaptation of her historical monograph on the Rocky River Bridge near Cleveland appeared in Vol. 2 (1976) of *IA*. Miller hopes to inspire other *SIA* members to help with the bulk of news gathering and writing for the *Newsletter* (see "SIA Affairs," elsewhere in this issue); in fact, it's an economic imperative since she does freelance work and has no organization or salary to "subsidize" time spent on this task.

Beginning in July 1980, the Program for the History of Science & Technology of Case Western Reserve University will provide support services—office, telephone, typing, and postage expenses—for the *Newsletter*. They have promised support for two years. Darwin Stapleton [*SIA*], Acting Director of the program at Case, deserves the Society's thanks for obtaining this welcome assistance.

IA IN (COMMERCIAL) ART



Belated season's greetings arrived recently from Charles K. Hyde [*SIA*], who offered the above item as an example of "IA in Greeting Cards." The card depicts the steel-framed shafthouse at the Number Two Shaft of the Quincy Mining Co., built in 1908 by the American Bridge Co.

The Quincy Copper Mine [*HAER*] is located in Hancock, Mich., on the state's most northerly arm—the Keweenaw Peninsula,

commonly known as the Copper Country. Quincy mined the rich Pewabic Lode from 1856 until 1931, when it closed. The company's Number Two Shaft reached an inclined depth of 9,260 ft. (6,310 ft. measured vertically) by this date, making it one of the deepest shafts in the world. The world's largest steam hoist was erected here in 1920 by the Nordberg Mfg. Co.

The greeting card—"certainly an example of IA in good taste," according to Hyde—was produced by Copper Country Arts, Lake Linden, Mich., about ten years ago.

LOOSE CONNECTIONS

Last fall, a 10-week BBC series about the evolution of technology, called "Connections," was carried over more than 250 PBS stations. The television series is now a best-selling book with the same title. Published by Little, Brown, it bears the byline of the series' writer and host, James Burke. *The New York Times Book Review* recently carried an interesting commentary on "Connections" by Malcolm W. Browne, who noted that none of the men who worked with Burke on the project was a trained scientist. We reprint part of Browne's comments here:

In both the television series and the book Mr. Burke would have us believe that today's technology is the inevitable result of successive improvements in man's inventions. The process, he holds, is serendipitous. Primitive gadgets somehow evolved, like living things, into today's computers and television and weapons.

Although Mr. Burke's broken-field intellectual dash on television could often sneak past the skeptical mind, its printed version is less successful because the reader of a book has time to pause and reflect. Mr. Burke tells us that "my purpose is to acquaint the reader with some of the forces that have caused change in the past, looking in particular at eight recent innovations."

First on his list is the atomic bomb. From this, one would expect at least a superficial glance at the half century of fascinating science that led to the atomic bomb. But Einstein is nowhere mentioned, nor Bohr, nor relativity, nor quantum mechanics. Apparently believing that real science is intimidating, Mr. Burke sidesteps it. He tells us instead that atomic bombs are somehow rooted in earlier innovations in weaponry. To make his point he leans on historical clichés, including the possibly spurious one about how the English owed their victory at Agincourt to the longbow.

Mr. Burke skirts every opportunity to explain science in terms of history. He tells us of efforts by the Lydians and ancient Greeks to assay gold for purity. But nowhere does he mention Archimedes, who not only solved the problem, but in so doing, discovered the relationship that made submarines possible.

He mentions Newton (once) as the inventor of a system of lenses, without hinting that Newton's laws of motion and invention of calculus are fundamental to modern technology.

He alludes to steam engines, but never to the vital lesson learned from them by Carnot—the Second Law of Thermodynamics—without which today's technology would not exist.

He writes of computers without telling us how quantum physics shaped the semiconductors that make them work.

The underlying idea of "Connections" is somehow reminiscent of the primitive South Pacific islanders who, after World War II, began building new runways on their primitive island, in hopes of inducing the cargo planes laden with riches to return. Technology doesn't just happen, however easy it is made to seem on television.

Naïveté can be excused, and so, up to a point, can commercialism. But the promise of "Connections" to satisfy real curiosity about science and technology seems no likelier to succeed than Laetrile as a cancer cure.

IA IN THE NATIONAL REGISTER

Compiled by Carol Dubie

This issue introduces a new SIAN department: a compilation of recent IA additions to the National Register of Historic Places. Nominations prepared by SIA members are so noted. Where only a property name and location appears, the nomination form could not be readily located.

National Register listings, Nov. 1, 1979 - Jan. 10, 1980:

CALIFORNIA

Union Ironworks Powerhouse, Alameda Co.

FLORIDA

Donald Roebling Estate, Clearwater. 1929 Tudor Revival residence and outbuildings; site where Roebling developed the "Alligator," amphibious tractor used in World War II landing operations.

GEORGIA

Railroad Overpass at Ocmulgee National Monument. Small brick overpass dating from 1870s, built for the Central RR of Georgia following the Civil War.

GUAM

Light Model Tank NU 95, Yona vic. 1935 Japanese tank, associated with the American recapture of Guam in World War II. Deteriorating—see it soon.

INDIANA

Kamm & Schellinger Brewery, St. Joseph.

IOWA

Pine Creek Grist Mill, Muscatine vic. 1848, 1973 mill, dam, and 1878 Pratt truss built by the Wrought Iron Bridge Co.

Maine

Dinsmore Grain Co. Mill, Palerma. 1914 wood frame grist and saw mill, with surviving machinery.

Carriage Paths, Bridges, and Gatehouses, Acadia National Park. Network of rustic paths with 13 bridges constructed of hand-hewn native granite, 1919-1932. (MCMOC members were treated to slides of some of these bridges by member Alan Clarke last fall.)

MICHIGAN

Columbia and St. Claire Steamers, Detroit. 1910 and 1902 steamers with original propulsion machinery.

Northern Brewery, Ann Arbor. 1886 brewery building.

MINNESOTA

Anoka-Champlin Mississippi River Bridge (US 52).

Hastings Foundry-Star Iron Works, Hastings.

Kappel Wagon Works, Red Wing. 1875 wagon works building; no remaining interior features.

Minnesota Stoneware Co., Red Wing. Brick factory complex, 1900s; portions of one kiln remaining.

Red Wing Iron Works, Red Wing. 1874 works played a significant role in community's development as a manufacturing center.

NEW HAMPSHIRE

Ashland Gristmill and Dam, Ashland. Wood frame gristmill of c. 1903 with surviving machinery; concrete mill dam.

Hopkinton Railroad Covered Bridge, Hopkinton. Two-span Town lattice truss, built 1849-50, rebuilt 1889, restored 1936, 1938; one of four RR covered bridges in State.

NEW JERSEY

Hackensack Water Co. Complex, Weehawken. Includes office building, brick-lined reservoir, gatehouse, and spectacular 1883 water tower designed by F.C. Withers and John F. Ward, the latter cited by *Engineering News* in 1886 as "the most important structure of its kind in the country" [SIAN Sept. 77:1]. Prepared by Terry Karschner [SIA].

Thomas Edison Memorial Tower, Edison. 1937 Art Deco commemorative structure topped with light bulb.

NEW MEXICO

El Paso & Southwestern Railway Water Supply System, Nogal vic. 1908-1914 wood stave line, joined with steel bell-&-spigot joints, longest RR water pipeline in N.M. when laid in 1908.

NEW YORK

Point Gratiot Lighthouse Complex, Dunkirk. 1875 lighthouse with keeper's residence served Dunkirk, second largest harbor (after Buffalo) on N.Y. coast of Lake Erie.

NORTH CAROLINA

Single Bros. Industrial Complex Site, Winston-Salem. Site of 1770s and 80s slaughterhouse and distillery, part of Moravian town.

Murray's Mill Historic District, Catawba. Water-powered flour mill of 1913 and associated structures.

OHIO

Chillicothe Water & Power Co. Pumping Station, Chillicothe. High Victorian Gothic pumping station; no surviving interior features of engineering significance.

Mill Road Bowstring Bridge, Bladensburg vic. c. 1876 bowstring arch truss fabricated by Wrought Iron Bridge Co. of Canton, O., with Phoenix-column-type compression members.

Ohio and Erie Canal Thematic Resources, Cuyahoga and Summit Cos. Three rural sections of the canal between Cleveland and Akron (completed 1827) totalling 16 miles and including canal bed and towpath, aqueduct remains, canal widewater, 10 locks, and Federal-period tavern. Abandoned 1913; well-preserved remnant of transportation system assessed to be "the greatest single impetus to the expansion and growth of Ohio." Prepared by Carol Poh Miller [SIA].

Tiffin Industrial Buildings Thematic Resources, Tiffin. 13 individual sites and buildings reflecting the transition from agricultural center to highly industrialized city between 1822 and 1916. Gristmill (1822, 1875), Mueller Brewery, Ohio Lantern, Tiffin Agricultural Works, and Bowman's Distillery represent earlier phase of agriculture-related industry; Beatty Glass Co., Wagner Bros. Bottling Works, Tiffin Art Metal, Hanson Machinery (cranes) and Tiffin Waterworks reflect later period. Some buildings have limited remaining interior features.



Droemer Brickyard, beehive kiln. Richard Steinbomer photograph.

OREGON

Covered Bridges Thematic Resources, Benton, Coos, DesChutes, Douglas, Jackson, Josephine, Lane, Linden, Linn, Marion, and Polk cos. 46 covered bridges, 1914-1960, illustrating the evolution of the wood truss form in Oregon bridges. Examples include king-post, queen-post, and Howe-truss types, one RR bridge (Chambers Bridge), and a 180-ft. span, the State's longest.

PENNSYLVANIA

Barneget Light Ship, Philadelphia. 1903 light ship, one of the oldest extant examples.

Covered Bridges Thematic Resources, Columbia nad Montour cos. Third in a series of theme nominations for Penna.'s covered bridges. (Juniata and Snyder Cos. listed 8/79, Washington and Green cos., 6/79).

Lehigh Canal, Allentown to Hopeville Section, Lehigh Co. 11 miles of canal and towpath, 5 locks, timber crib dam, one aqueduct and one lock tender's house. Between 1819 and 1931, canal was major link in transportation system of the Penna. anthracite region (SIA Fall Tour, 1979).



PRR Class E-2 Atlantic of 1902, Penna. Railroad Museum, Strasburg.

Pennsylvania Railroad Rolling Stock Thematic Resources, Strasburg. 13 engines, 1888-1930, and 12 cars, 1855-1906, representing standard classes of Penna. RR stock.

Pittsburgh & Lake Erie Railroad Complex, Pittsburgh. 40-acre complex of buildings from 1895-1920 period, including the previously listed Terminal Building, 1897 Freight House with Pratt truss-supported roof, and 1917 Central Warehouse.

TEXAS

Droemer Brickyard Site, Giddings. Intact 1870-1940 brickyard site with clay pit, storage and molding building with hand brick press, hammermill, conveyor belts, and round downdraft "beehive" fan used 1924-1940.

Saffold Dam, Guadalupe Co. c. 1853 boulder and gravel dam, 250 ft. long.

UTAH

Nunn Power Plant, Provo vic. 1898 complex of buildings associated with the development of long-distance transmission of electrical power for commercial use, brought electric power to the mines.

VIRGINIA

Alexandria Canal Tide Lock, Alexandria. Archeological site consisting of lock and holding basin, only known remains of 7-mile Alexandria Canal, which operated between Georgetown and the Potomac R. in Alexandria 1843-1886.

THOMPSON MILL REPAIR

Only three water-powered businesses continue to operate in the Pacific Northwest: a feed mill at Union Gap, Wash. (built 1869, rebuilt 1930); a flour mill at Eagle Point, Ore. (built 1872); and a feed mill 1.5 miles east of Shedd, Ore., on the Calapooya River. The latter was constructed in 1858 and rebuilt about 1900 after its destruction by fire. Last June, the east side of the mill structure collapsed when an 80-ft.-long by 20-ft.-high concrete wall was undermined by tailrace water.

Damage to the building is nearly repaired now, but management is faced with the new problem of finding a replacement gear for a 30-inch-diameter 1918 Leffel turbine. Leffel no longer supplies the gear, and custom fabrication is too costly. Remaining in operation are a second 30-inch and a 35-inch turbine, both working under a 12-foot head (75 and 102 h.p. ratings). All water wheels have electric backup for use during winter high waters. *R.K.M.*

SIA AFFAIRS

CORRESPONDENTS NEEDED. The Editor is seeking members willing to serve as *Newsletter* "correspondents." Correspondents, representing the various regions of the U.S. and Canada, would report regularly the IA news of their areas, sending clippings or—better yet—news briefs and/or longer articles ready to run. Overseas correspondents are also sought.

A network of correspondents should in *no way* discourage others from submitting occasional pieces or news items. In fact, the motto of Editor Emeritus Vogel is emphatically repeated: "If in doubt, send it along."

Also sought is an SIA member, presumably in the Nation's Capital, willing to report, as needed, on Federal legislation affecting IA concerns. Also, a volunteer willing to index each issue of the *Newsletter* as it appears.

In addition, submissions are wanted for such regular *Newsletter* features as "The Work of IA," "IA in Art," "The Museums," and "IA Survivals" (not-so-obsolete industries/technologies still making a go of it). Also, news of members' promotions, job changes, appointments, awards; news of IA-related exhibitions, events, organizations, &c. Contact the Editor, 1260 Granger Ave., Cleveland, O. 44107.

NEW COLUMN. The Editor proposes to introduce a new department of the *Newsletter*, tentatively titled "Follow-Up on the News," that will, as implied, *follow up* on stories previously carried in these pages; e.g., follow-up accounts on announced threats to sites, structures, and equipment; the end results of preservation and/or adaptive-reuse proposals, and other IA projects. Submissions for this column are wanted immediately.

ANNUAL MEETING — 1981: Tentatively, Central Conn., based in Hartford. Fall Tour: North Carolina. Dates & details to follow.

MEMBERSHIP COORDINATOR. About a year ago the Society's first holder of this important office (and, really, its originator), Irmgard (Nicki) Taylor [SIA] was succeeded by Ann Genacou when Nicki departed for the West Coast. Ann, too, now has left us, to take paid employment. She has been succeeded by Paul L. Smith, a long-time SIA member. Dr. Smith is a scientist, semi-retired, who does consulting work with the Naval Research Laboratory and other federal research facilities. Questions of membership, dues, and such matters may be directed to him, Rm. 5020, &c.

LOCAL CHAPTERS. Basic information, sample by-laws, &c are available from Donald C. Jackson, Local Chapters Chrmn., HAER, Pension Bldg., 440 G. St., NW, Wash., D.C. 20243. Names and addresses of SIA members in any area of the U.S./Canada, by state(s) or region, can be obtained from the Society's headquarters.

MISC. NOTES

PROGRAMS

"THE UPPER HUDSON: Its People, Development, and Challenge" will be the subject of a series of Sat. morning lectures to be held this spring at the Auditorium of the N.Y. State Museum, Empire State Plaza, Albany. All programs start at 10:00. Of special IA interest are the following: "The Emergence of the Hudson-Mohawk Industrial Region" by Thos. Phelan [SIA], Rensselaer Polytechnic Inst. and Pres., Board of Trustees, Hudson-Mohawk Industrial Gateway (Mar. 29); "The Ironworkers of Troy" by Daniel J. Walkowitz [SIA], Dept. of History, N.Y.U. (April 5); "Government Responses to 20th C. Urban and Industrial Change" by Erastus Corning II, Mayor of Albany (April 12); and "The Economic and Social Potential of the River" by Paul Marr, Dept. of Geography, S.U.N.Y. at Albany (April 26). The program is co-sponsored by Russell Sage College, the N.Y. State Museum/State Education Dept., and the Capital District Humanities Program.

OLD STURBRIDGE VILLAGE SUMMER FIELD SCHOOL IN HISTORICAL ARCHAEOLOGY (the fourth) will be held June 30-Aug. 15. Intended to provide students with a comprehensive, first-hand involvement in the historical and material culture of the early 19th C., as well as with the methods and techniques of field archeology. Students spend the first week at OSV, a major outdoor museum recreating a rural New England community of the years 1790-1840. Working with research, curatorial, and interpretation specialists, students will be acquainted with the culture and artifacts of the period through lectures, workshops, tours, &c.

Six weeks will be devoted to the investigation of historic Phoenixville, Conn. Using a multi-disciplinary approach to studying landscape, community structure, and material culture, the School will trace how the early agrarian neighborhood became industrialized. Students will be involved in excavation, survey, measured drawing, conservation, and other field, lab, and recording activities. The project will be based at Pomfret School. The Field School is directed by Dr. John Worrell, OSV Archeologist.

Tuition: \$300 (includes all fees, materials, daily transportation, and Museum privileges); food and lodging: \$525. Participation limited to 25 students. Application deadline May 1. Contact: Dr. Worrell, OSV, Sturbridge, Mass. 01566.

CONFERENCE ON THE PRESERVATION, RESTORATION, AND PRESENTATION OF EARLY TEXTILE MACHINERY, organized by the Int'l. Committee for the Conservation of the Industrial Heritage, will be held Aug. 20-22, in Diepenbeek, Belgium. The Conference will discuss practical problems, and is intended as a forum at which the specialists of different countries can exchange ideas. Conference sponsors, who emphasize that it is a *working conference*, invite museum professionals; government officials concerned with the conservation of industrial heritage; and historians, archeologists, and technicians. Conference language will be English. It is limited to 50 participants. Cost, \$120, includes conference fee, working papers, accommodations, and meals. Further information and booking forms, which must be returned by April 1, available from: Adrian Linters, 4 Voetball Straat, Gent, Belgium B-9000.

ARCHIVAL COLLECTIONS

INTERNATIONAL ASSN. OF MACHINISTS. IAM records ("so voluminous as to require a full day's work to remove them from a basement storeroom") have been deposited in the History Library of the Western Reserve Historical Soc., Cleveland. This same repository also recently accessioned the ledgers of the **Cleveland & Toledo RR**, a local line antedating the Civil War which was a forerunner of the N.Y. Central.

THE INTERNATIONAL LADIES' GARMENT WORKERS' UNION. Archives newly opened to the public contain correspondence of union presidents, records of union affiliates (such as N.Y. Cloak Joint Board), minutes of executive board meetings 1900-1975; also, publication files, local newspapers, oral history program. I.L.G.W.U. archives: 22 W. 38th St., 12th Fl., N.Y.C. 10018.

NEWS OF MEMBERS

ROBERT M. VOGEL, curator, Division of Mechanical & Civil Engineering, Smithsonian Institution, has been awarded the 1979 Civil Engineering History & Heritage Award by the American Society of Civil Engineers. Vogel was named for "his long and distinguished career in civil engineering history and preservation and for his pioneer efforts in industrial archeology."

AVAILABLE

ADIRONDACK IRON & STEEL CO. DRAWINGS. NL Industries, Inc., is offering for sale a set of 13 measured drawings prepared in 1978 as part of a HAER summer survey documenting one of the best-preserved ante-bellum blast furnaces in the U.S. The Adirondack Co. operated in Tahawas, N.Y., from 1833 to 1855, in an ultimately futile attempt to make iron from the largest iron deposit east of the Mississippi River. The drawings, reproduced at

one-half the original size on fine quality paper, include plans, elevations, and sections of a 45-ft. blast furnace (built 1848-1854) and the blowing engine. (Bruce E. Seely [SIA], a member of the survey team, used these same drawings to illustrate his report on the history of the Adirondack Co. at last year's annual meeting in Columbus.) The drawings and a capsule history of the company are enclosed in a protective folder. Price for the entire package is \$6. Requests should be directed to: Gordon Medema, NL Industries, Inc., MacIntyre Development, Tahawas, N.Y. 12879.

WINDSOR 2¼-INCH, 4-SPINDLE, AUTOMATIC SCREW MACHINE. Pre-1917, with collets. Wt.: c5 tons. Adapted to motor drive. Gratis to legitimate museum; scrap value to individual—as is, where-is. A. A. Allyn, Chardon Metal Prods., Chardon, O, 44024. (216) 285-2147.

INQUIRY

LIQUOR & DISTILLING MUSEUM. Barton Myers Assoc., of Toronto, is at work on the design and implementation of Canada's first museum of the liquor and distilling industry. They would like to locate sources describing the history and development of this industry in N. America, as well as suitable artifacts. Contact: Robert Hill, Barton Myers Assoc., 322 King St. West, 3rd Fl., Toronto, Ont., Canada M5V 1J4; or call collect (416) 363-5101.

LETTERS

Editor: I was very pleased to read the note on "Reusing Abandoned Railroads" by Stuart H. Macdonald in the Nov. 1979 *SIA*. These abandoned roadbeds are a legitimate concern of industrial archeology, and their utilization for recreation is a splendid way of preserving them. . .

For those readers who might be interested in additional information on the utilization of abandoned railroad rights-of-way, a couple of interesting and useful booklets are available: "From Rails to Trails," available from the U.S. Government Printing Office, Wash., D.C. 20402 at \$1.50, Stock No. 040-000-00330-4. "Availability and Use of Abandoned Railroad Rights-of-Way," available from the U.S. Dept. of Transportation, Wash., D.C. 20590, no cost.

For an inventory of abandoned rights-of-way in the U.S. there is *Right-of-Way, A Guide to Abandoned Railroads in the United States*. This book lists and maps all abandonments between 1937 and 1973. It is available from Maverick Publications, Box 243, Bend, Ore. 97701 for \$5.95. *Waldo J. Nielson, Rochester, N.Y.*

Editor: I wish to point out that an otherwise excellent account of the October Penna. Anthracite Tour in the Nov. 1979 *SIA* has an error which an old Lehigh Valley R.R. watcher cannot let pass. It was the L.V.R.R. which served Mauch Chunk with the Jersey Central, *not* the "Lehigh & Susquehanna." Mauch Chunk was one of the Lehigh's more famous towns. Asa Packer, whose mansion there is mentioned in the article, was one of the L.V.R.R.'s founders. The L.V.R.R. for years ran his namesake train, between Sayre and Bethlehem, if I'm not mistaken.

I am thankful that the author shares my preference for "Mauch Chunk" over "Jim Thorpe," however . . . *Daniel Mordell, Binghamton, N.Y.*

Dear Carol: I was just wondering what the proper title for a female editor of the *SIA Newsletter* ought to be. In keeping with the traditions of other trades and crafts in which women participate, what would you prefer to be known as: editress, editorette, editrix, or just plain editor?

You might wish to handle this straight away in the *Newsletter*, before runaway speculation among *SIA*'s dominant, assertive male contingent brands you for life! *David H. Shayt, Wash., D.C.*

Editor's note: No comment.

CORRECTION: We regret the failure to note in last issue's article on the Anthracite Tour that one of the principals in both the design and conduct of the tour was Vance Packard, Historic Site Administrator of the Penna. Historical & Museum Comm'n's. Drake Well Museum site, a founder of the *SIA*, and its first Treasurer. We apologize to Mr. Packard.

PUBLICATIONS OF INTEREST

Compiled by Robert M. Frame III & Robert M. Vogel

T.C. Barker, **The Glassmakers: Pilkington, 1826-1976**. London: Weidenfield & Nicholson, 1977. xxi + 557 pp. £10. Rev., *Technology & Culture*, Oct. 1978.

Gerald M. Best, **Railroads of Hawaii: Narrow & Standard-Gauge Common Carriers**. San Marino, CA: Golden West Books (Box 8136, 91108), 1978. 194 pp. \$21.95. Seven lines built between 1879 and the early 20s. Rev.: *RR History* 140 (Spring 1979).

Gerald Bloomfield [SIA], **The World Automotive Industry**. N. Pomfret, VT: David & Charles, 1978. 368 pp. \$24.50. Rev.: *Business Hist. Rev.*, Autumn 1979. To be reviewed in Vol. 6 of *IA*.

Asa Briggs, **Iron Bridge to Crystal Palace**. London: Thames & Hudson (500 5th Ave., NYC 10036), 1979.

Floy Brown & Sara K. Blumenthal, **Refitting the Boston Naval Shipyard at Charlestown**. In *11593*, October 1978, pp. 8-11. First appeared in (June 1978) *Environmental Comment*. Focus on urban waterfronts. Avail: Urban Land Inst., 1200 18th St., NW, Wash., DC 20036. \$1.

Robert Brueggemann, **Central Heating & Forced Ventilation: Origin & Effects on Architectural Design**. In *Soc. of Architectural Historians Jnl.*, Oct. 1978, pp. 143-60. Illus.

Keith L. Bryant, Jr., **Urban RR Station Architecture in the Pacific Northwest**. In *Journal of the West*, XVII (Oct. 1978), pp. 12-201.

Julian Cavalier, **North American Railway Stations**. A.S. Barnes & Co., 1978. 256 pp., illus. \$17.50.

Richard Cox, **Professionalism & Civil Engineering in Early America: The Vicissitudes of James Shriver's Career, 1815-26**. In *Maryland Historical Magazine*, Spring 1979, pp. 23-38.

Richard Dillon, Thos. Moulin & Don DeNevi, **High Steel: Building the Bridges Across San Francisco Bay**. Millbrae, CA: Celestial Arts Press, 1979. 176 pp., heavily illus. \$25. Based on official construction progress photos.

D. W. Garber, **Waterwheels & Millstones: A History of Ohio Gristmills & Milling**. Ohio Historical Soc., Columbus, 1970. 139 pp. Nice series of essays on milling in general and many Ohio mills, both standing and gone. Glossary of terms.

Hugh R. Gibb, Mendes Cohen: **Engineer, Scholar & RR Executive**. In *Maryland Historical Magazine*, Spring 1979, pp. 1-10. Little known but extremely important CE & ME with B&O, 1851-75.

Jack Goodwin, **Current Bibliography in the History of Technology (1977)**, in *Technology & Culture*, April 1979, pp. 403-514.

Robert L. Grindle, **Tombstones and Paving Blocks: The History of the Maine Granite Industry**. Rockland, ME: Courier of Maine Books, 1977. 277 pp. \$11.95. Rev.: *Business Hist. Rev.*, Autumn 1979.

Susan E. Hirsh, **Roots of the American Working Class: the Industrialization of Crafts in Newark, 1800-1860**. Phila.: Penna. Univ. Press, 1978. 170 pp.

Richard P. Horwitz, **Anthropology toward History: Culture and Work in a 19th-Century Maine Town**. Middletown, Conn: Wesleyan Univ. Press, 1978. 188 pp. \$17.00. Rev.: Sylvia Doughty Fries [SIA], in *Technology & Culture*, April 1979, p. 367.

Thomas P. Hughes, **The Electrification of America: The System Builders**. In *Technology & Culture*, Jan. 1979, pp. 124-61. Edison, Insull, S.Z. Mitchell.

John N. Ingham, **The Iron Barons: A Social Analysis of an American Urban Elite, 1874-1965**. Westport, Conn: Greenwood Press, 1978. 242 pp. \$19.95. Rev.: *Business Hist. Rev.*, Autumn 1979.

C.G. James & Richard Conniff, **The Energy People: A History of PSE&G**. Newark, NJ: Public Service & Gas. Co., 1978. 392 pp. Interesting utility co. history.

J. Kenneth Major [SIA], **Animal-Powered Engines**. London: B.T. Batsford, Ltd., 1978. 168 pp. \$5.95. Rev.: Bradford B. Blaine, in *Technology & Culture*, April 1979, p. 359.

Stanley Mallach, **The Origin of the Decline of Urban Mass Transportation in the U.S., 1890-1930**. In *Urbanism Past & Present*, Summer 1979, pp. 1-17.

Howard A. Mayo, Jr. **Low Head Hydro Development in North America**. American Soc. of Civil Engineers paper No. 3688. (Delivered Oct. 1979). 345 E. 47th St., NYC 10017. 22 pp., illus. \$1.50.

Roy W. Morse, Myra L. Phelps & Leslie Blanchard, **Public Works in Seattle: A Narrative History of the Engineering Dept., 1875-1975**. Seattle: Seattle Engin. Dept., 1978. 304 pp., illus., maps, index. Paper \$10.; cloth \$12. (From S.E.D., 9th Floor Counter, Municipal Bldg., Seattle, WA 98105. Checks: Seattle City Treas.) One of few American cities to have its public works so thoroughly chronicled.

Massimo Negri [SIA], (Ed.), **Archeologia Industriale—Atti Del Convegno Internazionale Di Milano 24/26-6-1977**. (Proceedings of the Intl. Conference on IA) Societa Italiana per l'Archeologia Industriale, via Rosellini 8, 20124 Milano, Italy. 300 pp. + 24 pp. illus. \$ unk. 31 essays by mostly Italian scholars but incl. D. Newell (Canada), N. Cossons (England), M. Nisser (Sweden), and W. Kalinowski (Poland). In Italian with English abstract of each.

Walter F. Peterson, **An Industrial Heritage: Allis-Chalmers Corp**. Milwaukee: Milw. County Historical Soc., 1978.

Morgan W. Phillips & Judith E. Selwyn, **Epoxies for Wood Repairs in Historic Buildings**. Tech. Preservation Svcs. Divn., HCRS, U.S. Dept. of the Interior, 62 pp. \$2.50 PPD. Complete chemical basis & methodology. Well illus. Avail. Supt. of Docs., Wash., DC 20420. Stock No. 024-016-00095-1.

William H. Pierson, Jr., **American Buildings & Their Architects: Technology & the Picturesque: The Corporate & the Early Gothic Styles**. Garden City, NY: Doubleday & Co., 1978. 500 pp., 312 illus. Some consideration of the development of the architecture of textile mills in New England. Rev.: Roger B. White [SIA] in *Id. Historical Mag.*, Spring 1979.

H. Benjamin Powell, **Philadelphia's First Fuel Crisis: Jacob Cist and the Developing Market for Pennsylvania Anthracite**. Univ. Park: Penna. State Univ. Press, 1978. 167 pp. \$10.00. Rev.: *Business Hist. Rev.*, Autumn 1979.

Terry S. Reynolds, **Scientific Influences on Technology: The Case of the Overshot Waterwheel, 1752-1754**, in *Technology & Culture*, April 1979, pp. 270-295.

Ellen Rosebrock, **Historic Fall River**. Boston: Preservation Partnership, 1978. 120 pp., illus. \$3. From: Fall River Historical Soc., 451 Rock St., Fall River, MA 02720. Based on inventory of historic bldgs. by PP, emphasis on preservation.

Robert E. Snyder, **Women, Wobblies, & Workers' Rights: The 1912 Textile Strike in Little Falls, NY**. In *N.Y. History*, Jan. 1979, pp. 29-57.

Trevor I. Williams (Ed.), **A History of Technology Vols. VI & VII: The 20thC, c1900 to c1950**. Oxford: Clarendon Press, 1978. 1530 pp. together. \$82. for the set. (\$39.50 & 47.50 indiv.) An extension of Singer's (*et al*) 5-vol. work (1954-58) that reached from the earliest times to c1900. Somewhat greater emphasis than in the earlier vols. on the economic, social, and political side, "in order to reflect their increasing importance in the 20thC." Covers sources of innovation; economics of technical devel.; trade unions; role of govt.; plus sections on fuels, atomic energy, transport, and literally every other aspect of tech. A fitting continuation of a monumental work.

CONTRIBUTORS TO THIS ISSUE

Charles K. Hyde, Wayne State Univ.; Richard K. McDonald, Bellevue, Wash. With thanks.