



# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume One Number 3

May 1972

### HAER SUMMER 1972 PROJECTS

The Historic Amer Engineering Record, Natl Park Svc, plans seven field projects for the summer: 1) **The 2nd State of Utah Survey**, with cooperation of the UT Heritage Fndn and the UT Engineering Council, HQ at the Dept of Arch, U UT, focusing on early 20thC power generation, RR and mining facilities. Prof Burtch Beall, U UT, will lead a team consisting of historian, two archts, two student archts and a student engr. 2) **State of West Va Survey**, with the assistance of Prof Emory Kemp, Chrmn, Dept of CE, U WV and the cooperation of the WV Dept of Archives & History and WV U, Morgantown, field HQ location. William J Wilhelm, Assoc Prof of CE, WV U, Proj Supervisor, will lead a team of archts and historians. 3) **State of Indiana Survey**, in cooperation with the Historic Landmarks Fndn of IN and the IN Historical Soc, HQ in the Dept of Arch, Ball State U, Muncie. Work probably will be concentrated in central & northern IN. 4) **General survey of six SW states**, over a one-year period, by students & faculty of Texas Tech U, including an inventory and in-depth recording of selected sites, under the direction of Joseph E Minor, Dept of CE. 5) **George Washington Locks of the Potowmack Canal, Great Falls, VA Survey**, fielded by the HAER Wash office in cooperation with the Natl Capital Region, Natl Park Svc and co-sponsored by the Natl Capital Section, ASCE. 6) **Preliminary to in-depth recording**, HAER also conducts state-wide inventories. Slated for the summer is the first chapter of a multi-year project in New England, cradle of Amer industrialization. Support for the NE Inventory so far is from the History & Heritage Comm, ASME; Curran Assocs; and the McCulloch Mansion Assn. William Rowe, a practicing engr and archt, will lead the

project. 7) **State of Florida Inventory**, sponsored by FL Technological U, led by John Paul Hartman, Prof of CE.

Information on IA sites/structures in any of the HAER project areas, especially IN & FL, would be appreciated by the staff. Please notify Douglas L Griffin, Chief, HAER, Natl Park Svc, 1100 L St NW, Washington, DC 20005.

### STATION PRESERVATION LEGISLATION

Bill HR 9719 was introduced last July by Congressman Frank Thompson (D NJ), as an amendment to the Natl Foundation on the Arts & Humanities Act, requiring the Chairman of the Natl Endowment for the Arts to "plan, develop and carry on a program under which the US will acquire unused or underused passenger depots now owned by RR companies in the US and make them available to communities for cultural activities, such as libraries, musical and dramatic presentations . . ." The Chairman would be charged with surveying stations and determining which should be acquired by the Govt, taking into account a number of financial, logistical, community and architectural-historical factors. The stations under the act would be leased to states or their subdivisions for the intended usage, with or without rental. The Bill also provides a \$1 million appropriation for FY 1972 to carry out its purposes. It presently is in John Brademas' (D IN) Select Subcommittee on Education awaiting hearings, to occur sometime this year. We will list dates when announced, in hope that as many as possible will testify in support of the Bill. In the meantime, individual letters to Thompson of support, encouragement and *making specific suggestions* cannot but help: House of Representatives, Wash, DC 20510.

### UNIQUE STRUCTURE LOST TO FIRE

It's hard to know which strikes more deeply: the loss of a worthy structure to ball and blade after a bitter fight in its defense, waged with the sure knowledge that it is to be succeeded by a greaseburger franchise; or the sudden, wholly unexpected, senseless destruction of one that was within a hair's breadth of permanent salvation. In the Jan Newsletter we described the remarkable Gothic-revival, two-aisle, two-story, timber lattice truss bridge of c1870 at the ex-Fairbanks scale works, St Johnsbury, VT. The bridge and the adjacent early section of the abandoned plant was leveled in the early

morning of 21 Mar, one day after submission of the form to Washington nominating it to the Natl Register. This is another of those distressing cases, not infrequent, where blazes of "mysterious origin" mysteriously attack disused industrial structures for which the respective city fathers declare themselves unable to discover any reasonable adaptive use. The only bright note in this latest historical tragedy is that its notoriety seems to have inspired considerable new interest in industrial preservation throughout the state.



August 1969

Jack E Boucher, for HAER



21 March 1972-AM



21 March 1972-Noon

CH Liebs

R P Johnson

## SITES & STRUCTURES

A public "informational meeting" (for apparent tactical reasons not called a hearing) was held 5 Apr by the MD State Hwy Admin on their proposed widening to four lanes of US 15 at Catoctin (iron) Furnace, Frederick Co. The furnace complex, a state property, is unique in MD, and one of few in the US, in including not only the furnace stack, but an intact street of workers' houses, some log, and the nearby ore pits. Catoctin operated until c1900. Several years ago US 15 was improved, the ROW being moved to within 150 feet of the furnace, obliterating, by filling, some of the ore pits. The present scheme advocated by the MSHA calls for the additional lanes to be placed between the present ones and the furnace, further encroaching upon it, intruding the sights and sounds of a four-lane highway, and worse, filling much more of the ore pits. These already have yielded an excellent 19thC ore cart and hold promise of more archeological material. Despite MSHA promises to mitigate degradation of the site so far as possible and underwrite full-scale archeological investigation of the pits prior to construction, many are deeply disturbed by the threat and so testified, including the Natl Park Svc, Smithsonian, MD Historical Trust, and SIA through its Editor. All favored an entirely new route considerably bypassing the site.

A particularly fine 18thC grist mill near Anselma, Chester Co, PA, still containing much early 19thC machinery, will be recorded this summer through the initiative of Mrs Samuel W Morris, secy, French & Pickering Creeks Conservation Trust, with the cooperation of the Hagley Museum, Greenville, DE. Hagley's James B Akerman will make measured drawings of machinery and supervise the inventorying of other objects in the mill. The miller since 1919, O Ernest Collins, will be interviewed during the project. It is hoped that this study will lead to the mill's permanent preservation. *Eugene S Ferguson, Hagley Museum/US DE.*

Preservation Ironies Dept. After standing staunch in service and dewatered obsolescence for nearly 140 years, the west arch of the handsome, masonry, three-span Seneca Aqueduct that carries the Chesapeake & Ohio Canal over Seneca Creek (Montgomery Co MD) at its confluence with the Potomac, was carried out by a freshet last fall. The Park Service immediately undertook stabilization, inserting tubular steel struts in the gap to absorb the thrust of the remaining arches and concreting the west abutment foundation where scoured. This spring a contractor has had divers salvaging the errant stones, which are being stockpiled for restoration. The divers have, unfortunately, also discovered serious scouring of the piers and the east abutment, necessitating additional costly concreting. Full restoration, which is planned in any case, may take the form of a reinforced concrete core faced with original stone in the original configuration, a scheme followed with considerable visual success in the case of several cast-iron and timber arch bridges in England and Sweden.

### More on Ironbridge

The activities of the Ironbridge Gorge Museum Trust (Jan Newsletter) are moving forward with an energy and scope that bode well for the future of this crown-jewel among historical



E A Battison

industrial sites. Ironbridge Quarterly (IQ), in its maiden issue for Jan last, without exaggeration reminds us that "If any single area can claim the distinction of being the birthplace of modern industrial technology, the Valley of the River Severn in Shropshire, centred on Coalbrookdale and Ironbridge, can amply justify that claim. Here, in the first decades of the eighteenth century, events took place which were fundamental in the evolution of industrialisation, not only in Britain but ultimately throughout the world. Here may be found still the evidence surviving in profusion of the first industrial society, the cradle of the first industrial nation."

The entire IGMT scheme is a multifaceted one, involving not only restoration of the Iron Bridge itself under a two-year program, but acquisition and restoration of workers' villages and other iron-related structures; organizing museums, and in general conserving, displaying, interpreting and publicizing what survives of the early structures, machines and processes of that important area. The support by Americans of an effort of such primary importance is strongly urged. This may be manifested through membership in The Friends of the Ironbridge Gorge Museum. Details: 25 Beech Drive, Shifnal, Salop TF11 8HJ, England.

### The FICCIM

A major undertaking of the Trust is the First International Congress on the Conservation of Industrial Monuments, 29 May - 5 June 1973, to include working sessions and tours of IA sites in the area. More information: Neil Cossons, Dir, IGMT Ltd, Southside Church Hill, Ironbridge, Telford, Salop. Here too, N Amer support is clearly imperative. The problems embraced by this area are universal, international, and to a considerable degree, unsolved. The illumination that we may expect will pour from the FICCIM cannot help but be of enormous benefit to Amer industrial preservation. A year's time is none too much to start planning for attendance, participation, and getting up the fare.

The Orleans (Cape Cod, MA) Cable Station of the French Cable Co has been acquired by the French Cable Station Museum in Orleans, which, funds permitting, plans for exhibition and interpretation of artifacts of marine-telegraphy technology. The station, built 1890 as a terminal and relay station for Brest and NY cables, closed in 1960, but contains much of its equipment, some original. The only other N Amer cable station preserved is at Hearts Content, Newfoundland. *Field Curry*

Natl Park Service's Western Region last winter undertook preliminary archeological study of the Harmony Borax Works in Death Valley (CA) Natl Monument prior to stabilization of the plant and hoped-for further development with visitor interpretation. The remains of the chemical processing industries generally possessing low appeal to the IAist, disproportionate to their importance, this is a welcome work. The refinery started operations in c1883, following discovery of borax deposits in the area. It was from Harmony that the legendary 20-mule teams hauled the refined mineral 165 miles to the Mojave railhead. In 1888 the works was closed. The principal remains consist of a boiler, a large vat, some masonry and adobe walls, and several eroded piles of borax. The goal of the present project was to uncover the remains of various buildings and other works known to have existed. On the basis of the material found it is surmised that a great deal more remains, that should lead to a nearly complete picture of the plant's original appearance. *Paul J F Schumacher, NPS-WR.*

Canadian Canals. Because of their declining commercial and increasing recreational usage, eight historic canals have been transferred from the Ministry of Transport Canals Divn to the Canals Branch, Conservation Program (which includes also the Natl & Historic Parks Br). CB, in developing the canals' recreation potential, will be concerned as well with their wildlife and historical values. Taken in are the Rideau, Trent-Severn and Murray canals in Ont; Carillon and Ste Anne

canals on the Ottawa River and St Ours and Chambly on the Richelieu River in PQ; and the St Peter's in Nova Scotia. *Intercom* (Dept of Indian Affairs & Northern Devel)

**"World's Most Important Factory" Terminal.** Because of its production inflexibility, Ford's celebrated Highland Park (MI) Plant will be closed down and razed in 1974, perhaps to be succeeded by—you guessed it—a shopping center. The plant is multiply epochal. Designed in 1910 by the brilliant industrial-plant architect Albert Kahn, when built it was the largest auto factory in the world (and remained so until Ford's River Rouge of 1925) and universally considered the most efficient. It was here that Ford introduced the \$5 Day, and in 1913, what is variously considered the deliverance and the scourge of mankind: the moving assembly line, from which, by 1925, were daily disgorged 9000 Model Ts. *David L Lewis, School of Bus Admin, UMI.*

### MISC NOTES

**British 1972 IA Conference, Glasgow (15-17 Sep—see Jan Newsletter)** provisionally will include papers on Scotch whisky distilling; heavy engineering in W Scotland; locomotive bldg in Glasgow; IA on the Isle of Man; Ironbridge Gorge Museum project; and a miscellany of shorter presentations, plus field trips. These conferences have always been wonderful opportunities to examine IA in its birthplace, and to meet a group of colleagues with parallel interests. Check with your agent for special fares. We will attempt to put in touch all N Americans going. Conference booking closes soon. Contact Editor *immediately* for blank if interested.



**Industriebauten (Industrial Structures) 1830-1930.** A collection of starkly documentary photographs of gas holders, pithead-hoist towers, lime kilns, water towers, silos, blast furnaces and cooling towers, mostly European, by Bernd and Hilla Becher were exhibited at the Sonnabend Gallery, 420 W Broadway, NYC and remain on sale. The Bechers, who have traveled in England as well on their mission of recording what they call "anonymous sculpture," mercifully are not engrossed with these monuments as abstract or arty, but rather as the honest works, whose appearance has little aesthetic basis and is determined solely by the pragmatic demands of function, that they are. (see Publs)

### ENQUIRIES & RESEARCH

**Canals.** Harry L Rinker, 2158 Drury La, Bethlehem, PA 18018, seeks contact with those who have done archeological work on 19thC canal-related sites. Preparing a bibliography on the canal movement and collecting data for a history of canal technology/engineering, he is anxious to learn of MS material, unpubl theses & essays, and articles in obscure publications.

**Iron.** David R Gould, Assoc Exhibit Planner (History), NY State Museum, 60 Commerce Ave, Albany, 12206, requires information on appearance, dimensions and materials of all the structures of a pre-Civil-War Adirondack iron mining & smelting site for use in constructing a large model. Surprisingly little data, particularly graphic, survives for that industry in that place at that time.

**Iron, &c.** Richard S Allen is compiling an annotated check list of sites connected with the production of iron, cannon, shot

and military hardware used in the Amer Revolution, an outgrowth of a larger, continuing project pinpointing the sites and remains (if any) of all NY State blast furnaces, in turn gradually being extended to cover the entire US. Those with similar interests are asked to contact him at NY State Amer Revolution Bicentennial Commn, Office of State History, 99 Washington Ave, Albany 12210.

**Screws.** Louise McA Merritt, Box 62, Irvington, NY 10533, undertaking an examination of the early development of wood-screw manufacturing technology in the US, seeks pertinent material, especially on the work of the Piersons, Ramapo, NY (1830s).

**City Hall Station, IRT.** Annual Conference attendees who obtained good color slides of the station they'd be willing to loan for duplication, kindly advise D A Morris, c/o Editor.

An IA guide of the US or NA is being contemplated. Information is needed on the more obscure sites, structures, museums, preservations, etc, of IA consequence, whether or not normally accessible to the public, that are apt to be unknown outside their immediate locale. The Editor.

### PUBLICATIONS OF INTEREST

One of the best media for a clear understanding of the Industrial Revolution and its remains is Longman's IA Series, for which the General Editor is L T C Rolt, eminent author on many aspects of the history of technology as well as IA. Each volume is heavily illus and contains a selected bibliography and gazetteer: 1) L T C Rolt, *Navigable Waterways*, \$8.00. 2) W K V Gale, *Iron and Steel*, \$6.75. 3) Anthony Bird, *Roads and Vehicles*, \$6.75. 4) Walter English, *The Textile Industry*, \$7.75. 5) Bryan Morgan, *Civil Engineering: Railways*, \$7.75. 6) J B Snell, *Mechanical Engineering: Railways*, \$7.75. 7) W A Campbell, *The Chemical Industry*, \$8.00. 8) A R Griffin, *Coalmining*, \$8.00. All + 30¢ post. Orders, or a flyer and more details: Longman Green & Co Ltd, Burnt Mill, Harlow, Essex, England.

Bernd & Hilla Becher, *Anonymous Sculpture, A Typology of Technical Constructions*. 1971. US distr: Wittenborn, 1018 Madison Ave, NY 10021. \$15. (see Notes)

*The Origins of Cast Iron Architecture in America*, introd by W Knight Sturges. A handsome, small-folio reprint by Da Capo Press of two trade catalogs—documents of prime importance in the development of this field where art and technology met so successfully: D D Badger's *Illustrations of Cast Iron Architecture* (1865) and James Bogardus' *Cast Iron Buildings: Their Construction and Advantages* (1856). Publ at \$37.50; \$29.50 from Friends of Cast Iron Architecture, 44 W 9th St, NYC 10011. And —

John G Waite (Ed), *Iron Architecture in New York City: Two Studies in IA*. [JGW, "The Edgar Laing Stores (1849)" & Wm Rowe III, "The Cooper Union (1853-59)."] Based on HABS/HAER surveys.] Albany: NY State Historic Trust & Society for Industrial Archeology, 1972. 100 pp. \$2.25, from FCIA (above). Heavily illustrated with contemporary engravings and HABS & HAER photos and drawings. The iron elements of the Laing Stores, designed by "inventor" of cast-iron architecture in America James Bogardus, were stored for future re-erection when the building was demolished, 1971. Cooper Union, erected by entrepreneur-inventor-engineer Peter Cooper, is one of the first in the US incorporating structural wrought iron, as well as quantities of structural cast iron.

That excellent industrial Museum, the Hagley, and the companion fine research Library, the Eleutherian Mills Historical, have begun publication of an informative, free, semi-annual *Newsletter*, describing their activities, acquisitions, and other matters of broad general interest. It is recommended: Newsletter, Eleutherian Mills-Hagley Fndn, Inc, Wilmington, DE 19807.

## SIA 1972 SITE-STUDY COMPETITION

The Society, as a means for encouraging active work in IA, is please to announce an informal competition for the reporting of field work. The competition is open to all, whether or not members, 22 or under, and not above undergraduate level. Entries should be finished reports, illustrated by photos, drawings, maps, &c, describing field study of a site, structure or system of IA interest that has not previously been recorded or reported on in

detail. Length is unimportant, but depth is. Entries, due by 31 Oct, c/o the Editor, will be judged by the SIA Board of Directors with an eye to general interest and excellence; the significance of the site; interpretive quality; and to a lesser extent, the quality of the graphic work. The winning entrant will be awarded a prize of \$100, and will be invited to present his paper at the 1973 Annual Conference, after which it will be published by the Society. Entrants may be individuals, classes or groups. Make your summer plans now.

## THE WORK OF IA

It is always pleasant to note active interest in America's industrial heritage taken by those on the verge of their life work. Last summer Eric Stein, just graduated from Episcopal Academy, Phila, presently at Swarthmore, made aware of the necessity for recording obsolescent processes by a brief talk on IA at the Smithsonian, on his own undertook a recording survey of the O P Berry Excelsior Mill (the Smith River Corp), Wolfeboro, NH, one of the last producers of a product rapidly being superseded by other packing materials. Stein, employing the total immersion technique, has produced a thorough record of the excelsior mfg process and the entire Smith River operation through research into the firm's history and prospects, measured drawings of the plant and production machinery, photography, and extensive interviewing of the principals and workers. We encourage others to undertake similar ventures. Expertise, while fine, is not an *absolute necessity* here; rather, an inquiring mind, average wits, and a good bit of enthusiasm. If advice is needed, SIA will be glad to provide it.

### The SIA 1972 Conference

The Society's First Annual Conference appears to have been a successful one from nearly every standpoint. About 90 attended, rather more than anticipated, of whom five were from Canada, representatives of various government historical bureaus. The Saturday sessions covered a wide range of topics, from the philosophical to the nuts-and-bolts; from the problems of preserving the entire industrial section of a city to the near self-preservation of a 75-year-old steel dam in the dry climate of Texas. A full report is in *SIAN Supplement No 2*, accompanying.

### The Promise of Adaptive Use

The increasing need for inexpensive space for a variety of social and civic functions is increasingly inspiring recognition that obsolescent industrial buildings are a resource of not only great potential usefulness from a strictly utilitarian standpoint, but given the right setting and a modicum of imaginative planning, that they can be treated as an aesthetic enhancement to a community. A recent development holds promise that the traditional prejudices which hold these structures to be filthy, exploiting, degrading and generally undesirable for any but their intended purposes, are slowly fading.

The Inst for Architecture & Urban Studies (8 W 40th St, NYC 10018) has received a \$10,000 grant from the NY State Council of the Arts for research into the preservation and continuing use of older industrial structures in small towns throughout the state. The study will consider these buildings, often possessing very real architectural merits, as latent physical and economic resources for the towns, many of which are losing population due to shifting economic and transportation patterns. In the first of the study's two phases, the general problem throughout the state will be analyzed; secondly, a demonstration study will focus on a particular case, investigating the adaptive use alternatives and those for establishing a stronger and more useful relationship between the structures and the physical patterns of the town itself. The spectacularly

handsome Harmony Mills complex (c1837-1885) in Cohoes (Mar Newsletter, Publs) fittingly will be the demonstration subject.

## SIA OBSERVATIONS

The SIA has once again received national journalistic notice. With us on the Sunday walking-tour portion of the NY Conference was veteran *New Yorker* roving observer of the extraordinary, Geoffrey Hellman, who, in the 29 Apr issue (pp 34-5), described in the accustomed diverting style the full-throttle rush through the Cast-Iron District under the guidance of Margot Gayle, and the special visit to the jewel-like City Hall [Loop] [Ghost] Station of the first subway (1904).

Supplies remain of a number of the April Conference special publications, which will be furnished gratis to members upon receipt of a stamp for each: *Reconstruction of the Brooklyn Bridge*, illustrated article by D B Steinman, 1952; *The City Hall [Loop] Station of the IRT, 1904* by Danny A Morris; *The New Terminal Station & Ferryhouse of the DL&WRR at Hoboken* (reprint), 1906. The late Dr Steinman, CE, was chief engineer for the Bridge's 1952 reconstruction. As biographer of the Roeblings and active historian of civil engineering as well as an eminent designer of suspension (and other types of) bridges, it was a fitting commission. The article was reprinted expressly for the SIA through the kindness of Steinman, Boynton, Gronquist & London, the cost generously underwritten by Mrs Steinman.

The gratitude of the Society is tendered to three men whose confidence in its future has induced them to extend it the flattering exceptional support of **Contributing Membership**: Field Curry, Harley J McKee; Cornelius Van S Roosevelt. It is equally gratifying to report that the SIA is fully *international*, on the sound basis not only of our many US and Canadian members, but of the encouragement and transoceanic membership of, at present, four English colleagues.

## THE NEWSLETTER

Information on the organization and objectives of the SIA, and a membership application blank were included in the Jan Newsletter. For those who missed this or wish copies for distribution, multilith reprints of the issue and blanks are available from the Editor.

**WARNING.** This issue will be the last widely broadcast to non-members. Henceforth the mailing list will be *drastically slashed*. SIA membership is suggested as the sole means of insuring continuing receipt of the Newsletter and other Society matter. Application forms: the Editor.

The bulk of Newsletter material seems to be coming from a relatively small number of sources and covering a fairly narrow spectrum of activities. Please heed the admonition in the No 1 issue: the SIA and its Newsletter will rise or fall as it receives the support of its membership. It is assumed that not all news, activities, plans, undertakings and inquiries are going to be blockbusters. Don't wait for one before making a contribution.

Tentatively, the SIA 1973 Annual Conference will be 4-6 May in Troy, NY, center of an area incredibly rich in IA. Plan now.