

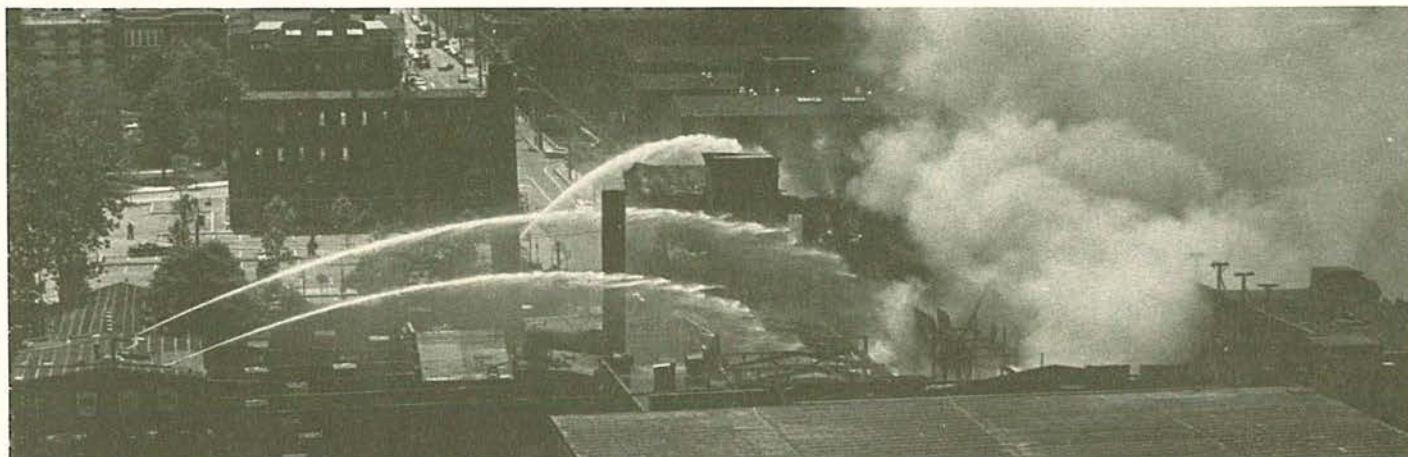
# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume 12, Numbers 2-3

Spring-Summer 1983

### PATERSON'S LANDMARK MILL DISTRICT TORCHED



*Above:* The morning after, firefighters continue to water down smoldering mill ruins in the Great Falls Historic Industrial District. *Below:* The gutted Waverly Mill, built in 1855. Mike Riccio photographs for The Paterson News.

A significant section at the heart of Paterson, N.J.'s historic industrial district (NHL, HAER), including the first Colt gun mill, was severely damaged in a massive 10-alarm fire June 24. The Mallory Mill (c1870-90) is totally gone, while the gutted Waverly Mill (1855) retains a standing wall. Both mills once were part of the city's silk industry. The much-altered Colt building (c1836) suffered roof damage but remains intact.

Untouched, thanks to the quick and exhausting work of city firefighters, were the adjacent Phoenix, Essex, and Franklin mills (all 19th-C.), along with a building historically associated with the Edison Illuminating Co. The Essex and Phoenix are being rehabilitated at a cost of \$9 million, and their 169 apartments were to have been joined in time by a much larger complex of offices, restaurants, shops, and apartments located in the destroyed structures.

Also spared was Raceway Park located a few blocks away, a reconstruction of the nation's earliest waterpower system and a component of Paterson's multimillion-dollar restoration of the 119-acre, once-derelict mill area. Major rehab plans for Paterson's Great Falls Historic Industrial District had been announced a year earlier, almost to the day, when then-mayor Lawrence F. Kramer and N.J. Gov. Thomas H. Kean celebrated the opening of Raceway Park (*SIAN* Summer 82:1). Now, Mayor Frank X. Graves could only survey smoldering ruins and declare, "This is a setback for the city, but we are determined to rebuild."

City fire and police departments launched an immediate investigation of the fire. They pointed out similarities to a fire two weeks earlier that destroyed the 1873 Hamil Mill, only two blocks away. A suspected arsonist was apprehended who appeared to have no specific motive for torching the historic structures.

Further complexities involving ownership of the mill buildings emerged in the wake of the fire. The Mallory and Waverly mills



were part of the complex of ATP Processors Ltd., successors to Allied Textile Printers Corp., and later purchased by two realty firms after ATP went out of business in 1981. The realty firms claimed that ownership had been given to the "National Preservation Institute" in Wash., D.C., but the status of the transfer was in doubt.

The Paterson Renaissance Organization (PRO) has since established ownership of the properties, according to Nancy Gay of the Great Falls Development Corp. Immediately following the blaze PRO declared their intention to go ahead with a \$20-million redevelopment of the Great Falls Historic District. Renaissance partners said they would attempt to reuse the buildings' bricks.

Whatever the outcome, the fire—which officials described as an inferno—will remind SIA members of many other destructive blazes, including the Nov. 1982 holocaust at Lynn, Mass., which wiped out many historic buildings from that city's historic shoe manufacturing industry (*SIAN* Winter 82:1-2). The Lynn blaze also was believed to have been the work of an arsonist.

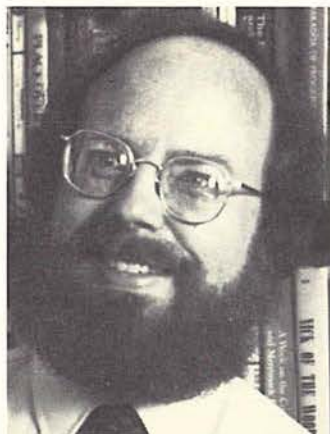


## NEW EDITORS AT S/AN AND IA

In March, Carol Poh Miller resigned as editor of the *SIA Newsletter* to take a position as writer-editor with Ernst & Whinney, a worldwide accounting and consulting firm based in Cleveland. With this issue the new editor becomes Robert M. Frame III and editorial offices move from Ohio to Minnesota. Meanwhile, David Starbuck has replaced Dianne Newell as editor of *IA: The Journal of the Society for Industrial Archeology*, moving those editorial offices from Vancouver, B.C., to Troy, N.Y.



David Starbuck



Bob Frame

Bob Frame assumes the *Newsletter* editorial post after several years of performing a variety of duties for the SIA, including a stint on the Board of Directors from 1977 through 1979. He also served on the *IA* editorial board from 1979 until its abandonment this year with the introduction of the journal's new editorial team. At that time he was chosen journal Book Review Editor, a post he has been filling for the moment as he gets under way with the new task of editing the *Newsletter*. Most recently Bob was Program Chair and general laborer (along with four other hard workers) for the 12th Annual Conference held in the Twin Cities. He also is president of the Minn. Chap., Society of Architectural Historians. Along with Robert M. Vogel, Bob has faithfully (albeit tediously) compiled the "Publications of Interest" *Newsletter* supplement since 1978. That important but unsung duty now passes to John M. Wickre of the Minn. Historical Society.

Bob holds a Ph.D. in American Studies from the University of Minnesota where he completed a dissertation on the Minneapolis flour-milling industry. Having spent several years as Architectural Historian with the Minn. State Historic Preservation Office, he presently is Assistant Curator of the James J. Hill Papers at the Hill Reference Library in St. Paul.

As the *Newsletter's* third editor, Bob steps into the proverbial hard-to-fill shoes of Robert M. Vogel, 1972-79, and Carol Poh Miller, 1980-83. Spring 1983 was Carol's last issue, and during her three previous years as editor she received substantive support from the Program for the History of Science & Technology at Case Western Reserve Univ., which provided an editorial office and covered the *Newsletter's* postage and telephone expenses. Darwin H. Stapleton (SIA) was responsible for arranging this valuable assistance.

While having worked as a freelance historic preservation consultant for many years, Carol does not rule out a return to preservation activities in the future. For the moment she is enjoying the challenge of adapting her research, writing, and editing skills to the business environment. She will remain actively involved in *S/AN* as an editorial advisor.

The new Publications-of-Interest co-compiler, John M. Wickre, is Asst. Head of Technical Services, Div. of Archives & Manuscripts, Minn. Historical Society. By virtue of a never-to-be-quite-completed M.L.S. degree, coupled with his archival training, John is an ideal person for the bibliographical post (although the editor notes that he would never admit to being a

librarian). He too has served the SIA in many ways, having been a member of the 12th Annual Conference committee and responsible for generating some \$1000 in cash contributions.

David Starbuck's first issue of the journal will be the 1983 issue (vol. 9). He is Asst. Prof. in the Dept. of Science & Technology Studies at Rensselaer Polytechnic Institute. In addition to being a member of the SIA Board of Directors, he is editor of the SIA's Southern and Northern New England chapters' newsletter. Holder of a Ph.D. in Anthropology from Yale Univ., David has been actively engaged in studying Shaker technology over the past six years and currently is researching the mill systems at Canterbury Shaker Village in N.H. and Hancock Shaker Village in Mass. He also is excavating a 19th-C. potter's shop in Concord, N.H. (subject of a paper at the 12th Annual Conf.) and spent the late spring with students recording the remains of the Burden Ironworks in Troy. (The editor notes that all of this makes for an extraordinary amount of interstate commuting and David reports that he seems to spend as much time writing while in the auto repair shop anteroom as he does in his office(s).) He serves on the Review Board of the N.H. Historic Pres. Office, is a trustee of the Shaker Heritage Society, and is a vice-president of the N.H. Archaeological Society.

David succeeds Dianne Newell, who began her journal editorship with the 1980 volume and labored at length to upgrade *IA's* scholarly standards. She resigned at the end of 1982 in order to begin a project of research and writing. The search for a new editor resulted in a decision by the Board of Directors to assign responsibilities to an editorial group headed by Editor-in-Chief David Starbuck who would be joined by Bob Frame as book review editor, Nancy Gordon as advertising manager, and Herbert Gottfried as business manager.

Herb Gottfried is professor of design studies at Iowa State Univ. (for biographical notes see "SIA AFFAIRS—News of Members"). Nancy Gordon, holder of a Yale Ph.D., has worked in freelance editing, writing, and translating, while serving as an occasional visiting lecturer in history at several colleges, including Mt. Holyoke and Univ. of Mass., Amherst.

Editorial correspondence for the newsletter should be sent to Frame at the James J. Hill Reference Library, 80 West 4th St., St. Paul, Minn. 55102 (612-227-3339), and for the journal to Starbuck at the Dept. of Science & Technology Studies, Rensselaer Polytechnic Inst., Troy, N.Y. 12181 (518-270-6411).

### To the Editor:

I was very much interested in the photograph of the concrete arch across the Mississippi R. at Minneapolis [*S/AN* Fall 82:7]. I worked for Blaw-Knox of Pittsburgh from 1927 to 1936. They manufactured steel forms for tunnels and steel centering for concrete arch bridges. I worked on the Westinghouse Bridge (1930) just east of Pittsburgh, which had a span of 460 ft., also on the Jacks Run Bridge (1931) across the Ohio R. just west of Pittsburgh. This had a span of 420 ft. However, the bridge job I enjoyed most was the Columbia-Wrightsville Bridge. It was then, and I believe still is, the longest multiple-arch highway bridge in the world. At the moment I am working to have the American Soc. of Civil Engineers designate the Columbia-Wrightsville Bridge a Nat. Historic Civil Engineering Landmark. Any assistance the Society can give me would be much appreciated. Robert S. Mayo. P.O. Box 1413, Lancaster, Pa. 17603.

The *SIA Newsletter* is published four times a year (Winter, Spring, Summer, and Fall) by the Society for Industrial Archeology. It is sent to SIA members, who also receive the Society's journal, *IA*, published annually. SIA promotes the identification, interpretation, preservation, and re-use of historic industrial and engineering sites, structures, and equipment. Annual membership: individual \$20; couple, \$25; institutions, \$25; contributing, \$50; sustaining, \$100; student, \$15. Send check payable to SIA to Treasurer, Room 5020, National Museum of American History, Smithsonian Institution, Washington, D.C. 20560; all business correspondence should be sent to that office. Editorial correspondence should be sent to ROBERT M. FRAME III, Editor *SIA Newsletter*, James J. Hill Reference Library, 80 W. 4th St., St. Paul, Minn. 55102.



# PASCO-KENNEWICK BRIDGE CASE CREATES POTENT LEGAL PRECEDENT



The P-K Bridges: 1978 cablestay (L) and 1922 "Golden Rivet" (R). The diminutive "Rivet" actually is a 3,000-ft., 14-span span product of the Union Bridge Co. *Peter Gomena photograph.*

Soaring over Washington state's Columbia River between the cities of Pasco and Kennewick is a dramatic, concrete-and-steel cablestay bridge built in 1978. The observer may not appreciate the great size of this elegant structure until realizing that dwarfed, in its shadow, stands a substantial steel cantilever truss, itself a large and massive bridge by almost anyone's standards.

When the new \$30 million cablestay became the "official" Pasco-Kennewick Intercity Bridge, the old truss was unimaginatively renamed the Benton-Franklin Intercounty Highway Bridge. Ever since its 1922 dedication ceremony, however, it has also been the "Golden Rivet Bridge" in commemoration of its "golden-spike" status as the last link in the nation's first organized transcontinental motor vehicle highway, the Plymouth Rock-to-Puget Sound "Yellowstone Trail." In 1979 the "Golden Rivet" was recorded by HAER and subsequently determined eligible for the National Register.

Since the cablestay's erection, the "Golden Rivet" has become increasingly notorious as the subject of controversial legal attempts by the two cities to demolish it. On March 15 it achieved a new distinction when the U.S. 9th Circuit Court of Appeals in San Francisco released a decision which, according to the *Preservation Law Reporter*, "could be significant for protecting historic sites threatened in some manner by federally funded highway projects, particularly historic bridges." The decision came in "Benton Franklin Riverfront Trailway and Bridge Committee v. Lewis," Lewis being former Dept. of Transportation Secretary Drew Lewis, who was joined on the list of defendants by current DOT Secretary Elizabeth Dole and the cities of Pasco and Kennewick (*SIAN* Spring 82:8).

The decision in the case, which had been appealed from U.S. District Court, involved Section 4(f) of the DOT Act of 1966. The appeals court reversed the district court, which held that the Federal Highway Admin. (FHWA) had lawfully determined that there were no feasible and prudent alternatives to the demolition of the bridge. The 9th Circuit found merit in the Trailway & Bridge Committee's argument that the bridge could not be demolished because the Secretary, in failing adequately to consider alternatives to demolition, had not complied with Sec. 4(f), and had acted arbitrarily in concluding that there were no feasible and prudent alternatives. The court found the Secretary's determination inadequate because it discussed only funding of alternatives by the cities of Pasco and Kennewick or the Committee, and failed to consider the availability of federal funds for rehabilitation or preservation. The court criticized the Secretary for arbitrarily selecting "no action" as the exclusive alternative to demolition.

Significantly, the court also commented on the failure of the State Historic Preservation Officer to prepare a timely, comprehensive statewide survey of historic properties in accordance with applicable federal regulations. Because there had been no survey, the bridge was not considered a historic and protected site to be taken into account at the time the FHWA prepared an environmental statement and evaluated construction of the new bridge. But the federal agency could not argue that the historic site was identified too late in the funding approval process because there existed a similar duty for the FHWA to have identified it earlier.

"The (court) decision," says the *Reporter*, "should require the Secretary of Transportation to consider, in future situations, that federal funds can be used both for rehabilitation of a historic bridge and for construction of a new bridge as part of the same project."

The 9th Circuit, in conclusion, remanded the matter back to the District Court, which in its July Order of Remand ordered a new Sec. 4(f) determination, considering alternatives to demolition in accordance with the 9th Circuit's opinion. Moreover, the Remand forbids the cities from razing the bridge until the new determination is complete, even if they use their own money. The ball is now in the preservationists' court and they must carefully pursue "feasible and prudent" alternatives.

Joining the case as *amicus curiae* was the National Trust, represented by Regional Counsel Nancy Shanahan. In making its decision, she says, the court reaffirms Sec. 4(f) as a strong law. In the future, FHWA must seriously address alternatives to demolition. The Pasco-Kennewick Bridge case may hold important implications for other bridge demolition controversies nationwide. (*Editor's Note: Interested persons should consult the discussion in Evelyn Mittman Wrin, "Benton Franklin Riverfront Trailway and Bridge Committee v. Lewis," Preservation Law Reporter, May 1983, source for much of the material in this article.*)

## BRIDGE SUPPLEMENT FOR *SIAN*

Replacement of old bridges has stimulated interest in their preservation and history. In addition to the historic bridge inventories being completed by state highway departments, many students of engineering history are researching bridge companies, patentees, bridge fabricators, marketing, and manufacturing methods, the superiority of one truss type or patent over another, and other topics of interest.

Consulting engineers, state highway officials, and federal transportation authorities are studying the rehabilitation, relocation, and adaptive use of bridges to a limited degree.

Because interests have increased over the past five years and threats such as the recently enacted nickel-a-gallon gas tax have not abated, several *SIA* members, while at the Twin Cities annual meeting, discussed the possibility of organizing a special bridge interest group. Rather than found another organization, however, it was decided to prepare special *SIAN* supplements devoted to bridges, to be published as events and issues develop.

These occasional supplements would be both academic and advocative. Articles might cover such topics as: update on the Pasco-Kennewick Bridge story; rehab of the Delaware Aqueduct and Brooklyn Bridge, restoration of the Bollman suspended and trussed bridge at Savage, Md., and other case studies; updates on statewide historic bridge inventories; a bibliography on bridge history scholarship; regulations and standards affecting historic bridges; and bridge recording projects.

Additional issues of each supplement will be available at nominal cost to transportation officials, consulting bridge engineers, and bridge enthusiasts who are not *SIA* members. Story ideas and information leads can be sent to Eric DeLony, 10216 Lorain Ave., Silver Spring, MD. 20901. *E.N.D.*



# SIA FALL TOUR — COLORADO, OCTOBER 13-15

*Editor's Note: Based at the Western Museum of Mining & Industry in Colorado Springs, the SIA Fall Tour will take place from the 13th through the 15th of October, Colorado's most attractive month. Museum Director Peter Molloy [SIA] has organized two days of tours along with a reception and dinner. He submits the following outline of activities.*

The first day will include visits to an 1890s hydro-power plant in Manitou Springs, a look at the Pike's Peak inclined railway, and a tour of the Cripple Creek Gold Mining District, located about 50 miles from Colorado Springs on the west side of Pike's Peak. The camp has operated from the 1890s to the present. While in the district we will see the Silver State gold extraction

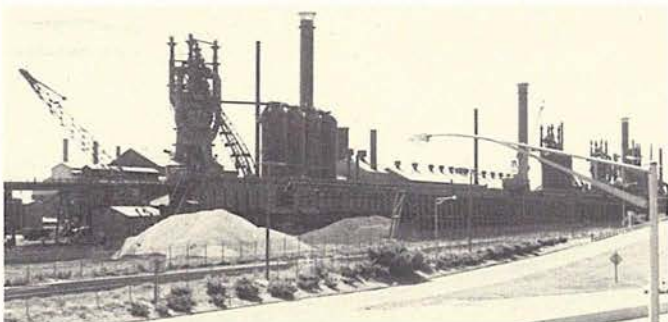


Above: Cripple Creek, Colorado, rebuilt in stone after disastrous 1900 fire. Below: Headframe and rock house (c1894) of the Strong Mine, Cripple Creek District. Peter Molloy photographs.

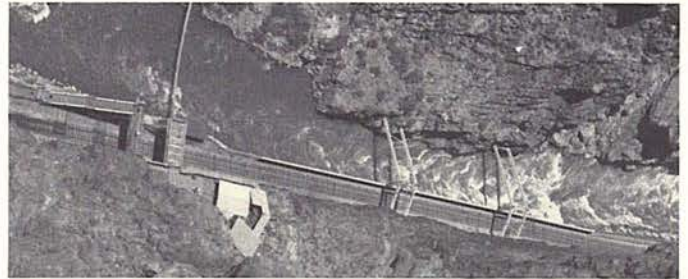


company, the Carlton gold mill, and the Ajax Mine, all in operation. We also will take walking tours of Cripple Creek and Victor, which contain hundreds of commercial and residential buildings c1894-1920. The district is spotted with the remains of dozens of now-defunct gold mines. There also is a fine history museum in Cripple Creek and its director, Leland Feitz, will be on hand to guide us through the district.

The second day will include a trip to the Royal Gorge of the Arkansas R. near Canon City, one of Colorado's oldest towns. The Gorge, with its suspension bridge and inclined tramway, is one of Colorado's leading attractions and contains some interesting objects for historians of technology, such as the unusual



Furnace row (1900-03) of CRI&I's Minnequa works, Pueblo.



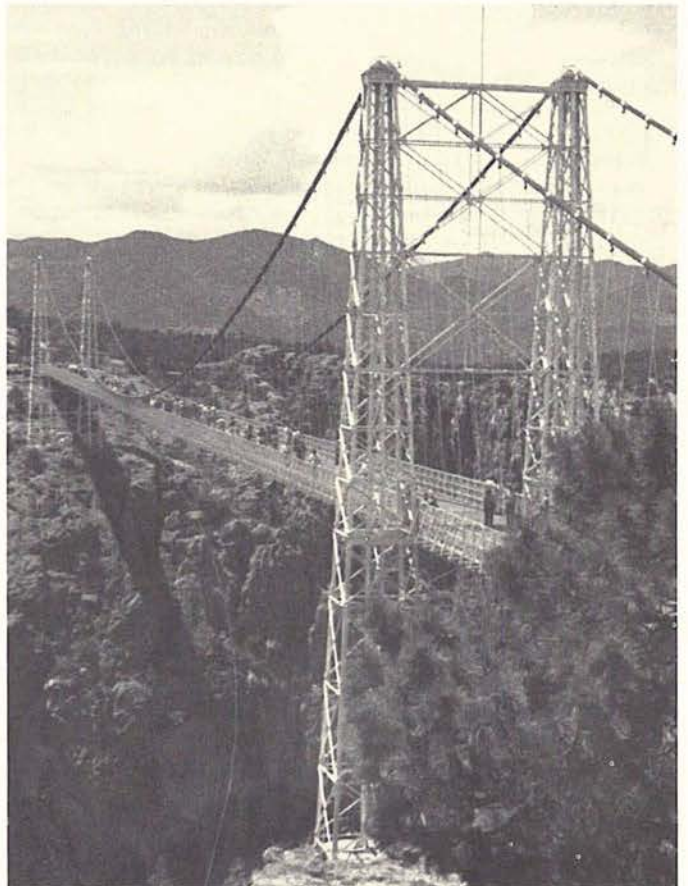
Straight down, at the bottom of the Arkansas River's Royal Gorge, is the Denver & Rio Grande's "hanging bridge" (1880s), part of the line linking Pueblo's smelters with the mines at Leadville. Nearby are the Gorge suspension bridge and the inclined tramway (1931).

1880s "hanging bridge" that provided a right-of-way for the Denver & Rio Grande RR by suspending a structure from the vertical rock walls rather than cutting a shelf in this stretch of the Arkansas R. gorge. In the afternoon we will visit the C.F. & I. Corp. in Pueblo, Colorado's most industrial city. At C.F. & I., the largest steel plant west of the Mississippi, we will inspect the seamless-pipe, nail, fence, and rail mills.

Tour attendees also are invited to a reception and dinner at the Western Museum of Mining & Industry, which has extensive exhibits of gold and silver mining and ore-processing machinery.

For those tourgoers with some extra time, October is an excellent time to tour the mountain areas of Colorado. Snow is not yet a problem, the aspen leaves are changing, and the summer tourists are gone, resulting in few crowds and low motel rates. The Denver Historical Society, as well as the mining towns of Central City, Georgetown, Silverton, and Duray, are well worth seeing.

P.M.M.



With the Arkansas River 1,055 ft. below, Royal Gorge suspension bridge is not for the vertiginous. Built in 1929 as a tourist attraction, it's billed as the world's highest suspension bridge.



## SIA AFFAIRS

### ANNUAL BUSINESS MEETING, MAY 14, 1983, SAINT PAUL, MINNESOTA

The meeting was called to order in the Weyerhaeuser Auditorium of the Landmark Center, St. Paul, at 12:45 p.m., by Patrick M. Malone, president.

**CHAPTER COORDINATOR'S REPORT** (Thorwald Torgersen). A brief oral report supplemented a written "State of the Chapters" report [see "Chapter News—Annual Wrapup," below].

**TICCIH.** Helena Wright described preparations as they are progressing for the International Conf. on the Conservation of the Industrial Heritage triennial meeting, with Steve Victor as Coordinator, noting that the Lowell Industrial History Conf. and TICCIH would add up to a week of papers and tours immediately before the 1984 SIA Annual Conf. (see article on 1984 conferences elsewhere in this issue). President Malone entertained a motion to thank Steve Victor for his development work on the TICCIH meeting.

**TREASURER'S REPORT** (Marlene Nicholson). Reported a \$728 surplus in the 1982 operating budget. Report approved unanimously.

**REVISION OF THE SIA CONSTITUTION & BYLAWS** (Amy Schlagel). This matter was the major concern of the Board over the previous year. Schlagel noted that the Articles of Incorporation had been revised to fit the laws of the District of Columbia where the SIA is incorporated. All operating procedures have been shifted to the new Bylaws which recently were approved 233 to 3 by a mail ballot of the membership. She further observed that the new Bylaws have been written so that further changes can easily be made at the wishes of the membership. At issue at this meeting was only approval of the new Articles. President Malone went through each article for the meeting, noting changes, which amounted only to deleting the old Articles 4 through 10 and substituting new Articles 4 through 7. Approval was unanimous. Thanks were voted to Craig Miller [husband of Carol Poh Miller] for his assistance in revision of the Articles and Bylaws. Schlagel then presented "Proposed Changes to the By-laws Resulting from Comments Received" [copies available from the SIA national office]. During the course of subsequent floor discussion, four Sections were identified as arousing substantive concern and referred to the Board for decisions about whether or not to recommend further changes in the Bylaws: (1) Sec. 5.05 Expulsion of Members. (2) Sec. 5.06 Use of the Membership Roll. (3) Sec. 7.03 Removal of Officers or Agents. (4) Sec. 2.05.A Requirement that there be Multiple Candidates for Offices. President Malone said that these proposed further changes to the Bylaws had not yet been discussed by the Board but would be. No other changes were suggested from the floor. Malone said that the national office would mail to the entire membership a request for members to propose further changes.

**THANKS.** President Malone said he thought the organizers of the 1983 Annual Conference had done "an exemplary job" and singled out for praise: the Planning Committee (Tim Glines, Nick Westbrook, Virginia Westbrook, John Wickre, Bob Frame); Russell W. Fridley and the staff of the Minnesota Historical Society; James J. Hill Reference Library; Ramsey & Hennepin county historical societies; James C. Tillitt, formerly of Wheeler & Tillitt, successor to C.A.P. Turner Co.; tour hosts; and contributors, including Maurice Stans, Saint Paul Companies, Northern States Power Co., Burlington Northern Inc., and OPUS. Malone thanked outgoing editors Carol Poh Miller (*SIAN*) and Dianne Newell (*IA*) for their service and announced the appointment of the new editors, Robert M. Frame III (*SIAN*) and David Starbuck (*IA*).

Malone announced that Ted Penn has retired as Development Officer and expressed gratitude for his fundraising work over the past three years. He also expressed thanks to the national office staff at the NMAH, Smithsonian: David Shayt, Howard Cayton, Prof. Looney, and Robert M. Vogel, who leaves the Board after his year as past president and becomes Operations Officer with privileges of attending Board meetings. Finally Malone offered thanks to the directors, other officers, and the nominations committee for making his year easier in office.

**PRESERVATION EFFORTS.** Malone noted the SIA's efforts this past year to preserve the last surviving Apollo launch pad at Cape Canaveral, N.Y.'s Cast Iron District, and Historic Harrisville (N.H.). He noted the failure to preserve the Bellows Falls (N.H.) Bridge.

**ANNUAL ELECTIONS.** Carol Dubie, head of the nominations committee, announced the result of the annual elections, held under the new Bylaws. 228 ballots were cast.

President: **Larry Lankton**  
Vice President: **Helena Wright**  
Secretary: **Terry Karschner**

Directors: **David Shayt, Steven Victor, Nicholas Westbrook**  
Nominations Committee: **Merrill Wilson**

Malone turned the meeting over to incoming President Lankton who adjourned the meeting with dispatch. *Michael Folsom, Secretary.*



### NEWS OF MEMBERS

*Windmills, Bridges and Old Machines*, by **David Weitzman**, was awarded Special Commendation for children's non-fiction by PEN Los Angeles Center. PEN, an international writers' organization taking its acronym from "Poets, Essayists & Novelists," made the presentation at the 1983 7th Annual Awards Banquet in May.

**Herbert W. Gottfried** is among 47 chosen for Class IV of the W.K. Kellogg Foundation's National Fellowship Program. The Program is "aimed at helping the nation expand its vital pool of capable leaders" and therefore "is structured to increase individuals' skills and insights into areas outside their chosen disciplines." Gottfried receives a 3-year grant of up to \$35,000. Using the 25% release-time he will receive from Iowa State Univ., he will study the design of "self-sustaining environments"—that is, environments which will provide shelter, grow food, produce energy, and recycle waste. He sees IA, particularly mills, as prime design candidates. Presently Prof. of Design Studies, Gottfried is co-author of *American Vernacular Design, 1870-1940*, to be published next year by Van Nostrand Reinhold, and presented a paper on IA vernacular at the SIA Twin Cities conference.

**David Simmons** has assisted in the production of *The Ohio Historic Bridge Inventory, Evaluation & Preservation Plan* (270 pp., 1983, \$20 ppd. Avail.: Bureau of Environmental Services, Ohio DOT, 25 S. Front St., Columbus OH 43125). Says bridge aficionado **Donald Jackson**, "This is among the most in-depth reports yet prepared for a statewide historic bridge inventory project. This extensively illustrated volume includes write-ups of over 90 of the most historic bridges in the state, overviews of Ohio bridge history, a preservation plan, and a discussion of criteria used to evaluate the significance of specific spans."

**Glenn Porter** has been appointed to the new post of Deputy Director of the Eleutherian Mills-Hagley Foundation, Wilmington, Del. Porter had been Director of the Regional Economic History Research Center at Hagley.



## 12th ANNUAL CONFERENCE — A VISIT TO MINNESOTA'S TWIN CITIES

We've heard it so many times before that it's apt not to impress as once it might have: "It Was the Best Ever." But really, folks, we mean it (we've always meant it—they *do* seem to get better and better, with the odd exception). It was a stunner, the consequence of a setting without peer in terms of overwhelming industrial-archeological concentration, and planning of a caliber that made the Great Train Robbers look like kindergartners.

The territory was entirely new for the majority of us, the farthest north and west of the conferences, although many of the sites seen have been cited in these pages over the years. The overlying theme was, naturally, the region's principal industries: the handling and processing of cereal grains; the rail and water transportation systems for their movement in and out of the area; and the myriad industries, structures, systems, and people that appeared in support. There was, of course, an awareness of the other industries that brought wealth and celebrity to the Twin Cities: lumber; fur; dairying; and meat packing, but the realization never left us that in this part of the world, portal of the northern great plains, Wheat was and remains King.

Events started early this year, with a series of Thursday afternoon workshops on the methodology of instructing IA at the secondary-school level, conducted by, among others, Michael Folsom and David Weitzman, the principals of the Society's ongoing curriculum project. These sessions, well attended by both visiting attendees and a good number of local teachers, were felt to be a worthwhile feature, meriting repetition. Concurrently, an informal workshop was held at the Minnesota Historical Society (MHS) on the use of archival collections in the support of IA, at which its custodians proudly exhibited at least the fringes of their holdings of Great Northern-Northern Pacific railway records, occupying three *linear miles* of shelf space (longer than some railroads we know).

The evening was set off by an MHS-hosted reception at the mansion (NHL, 1888-91) of the legendary James J. Hill, the "Empire Builder," whose Great Northern Ry. opened up the northern plains states. What most impresses, apart from the house's sheer sumptuousness of scale and style, is that here is the ultimate expression of the builder's craft, seen in every physical attribute of the structure, from the framing of the roof (in steel) to the heating and ventilating plant (of complexity appropriate to a fair-sized steam station) to the seemingly mundane matter of the hardware, much of which on the basis of its massiveness appears to have been specially produced.

**FRIDAY**, traditionally the day of the "Process Tour," was one of the conference's many high spots, with not a dud in the lot. Even the stretches between stops were awash with a steady stream of factories, warehouses, meatpacking plants, bridges, and other points of IA interest seen through the bus windows, all fully described by the corps of particularly well-informed guides. The major stops, all of intense interest, were:



Dwarfed by the looming halves of a split-hull hopper barge, Pats Malone & Martin (L) and others tour Twin City Shipyard, St. Paul. Robert M. Vogel photographs.

**TWIN CITY SHIPYARD, INC.**, builders of steel barges for the river and coastal trade. Although business appeared a bit squishy at the moment, there was enough work in hand that a clear idea could be formed of the entire process. The making of the conventional river barge is a fairly straightforward matter of assembling sheetmetal by welding—big scale but routine. The proprietary-design "split-hull hopper barges" were another matter. These 200-foot seagoing mechanized bivalves, filled with dredged spoil, are towed to sea, and when at the dumping site open up along their main axis, the halves kept together by hinge pins at the top of the bow and stern. The spoil simply drops out. The two halves, independently buoyant, then are drawn back together by hydraulic gear which is powered by a diesel pump in each barge. Already remarkable enough, you would think. But, you ask, how could a crew maintain footing on these things when in the split position, with everything at a crazy angle? The pumps, and all controls for opening and closing the barge halves are radio-controlled from the tow boat! Not a particularly early plant (1969) but a formidable product.

**GREIF BROS. COOPERAGE.** One of three surviving cooperages in the U.S. producing "tight" or "wet" barrels, and sole survivor in the Twin Cities region where once coopering was a huge industry providing the containers in which the flour was shipped. Today the product is used principally for decorative purposes, although the manufacturing process remains essentially unchanged. The works was built in 1891, and much of the machinery is of that period. At its height toward the end of the 19th-C. the cooperage industry was fully mechanized, the classical steps in the making of a barrel being imitated by machinery. Greif's starts the process with logs, from which the stave and head

BARRELS, from the Alpha... "Raising the barrel," at Greif Bros. cooperage, St. Paul. Using trial and error, the correct number of staves are skillfully worked into a round form. Next, a temporary steel hoop will be fitted part way down, the staves steamed, and shaped into a barrel with a second hoop. Worker assisted by M. Mouse.



...to the Omega. The "redriver" forces hoops down into their permanent positions, completing the barrel-making process.



stock is cut, air and kiln dried, the parts then planed and finished. The only step in the process that has defied mechanization, and still requires the essential skill and judgement of the worker, is the "raising" or assembling of the staves about the head to form the barrel. As the staves are of random widths, the raiser must select staves of correct number and total circumferential width to form a barrel of the precise diameter wanted. Altogether an animated, busy, visually interesting, and historically important site.

**CREAM OF WHEAT PLANT.** While the actual process of producing this most classical of all proprietary hot cereals was not of consuming interest—in fact still is regarded as an "industrial secret" and so was only partially revealed to us—there was a strong feeling of the historic as we trekked through. The "product" (as it was invariably referred to by our guides, as though a euphemism for something slightly indelicate) was developed by a small North Dakota mill in 1895, and survives to this day literally unchanged in form and method of production. (There is, of course, no dairy involvement in making "cream"—it is a "sifted refinement of the cracked wheat kernel known as "middlings" as it emerges from the first-break rolls of the flour milling process.") The firm moved to the area early in the century and erected the present, splendid, reinforced-concrete plant in 1927. The non-manufacturing areas of the building have been lovingly preserved, to the firm's credit.

**FORD MOTOR CO.'S. TWIN CITY PLANT & HYDRO-ELECTRIC STATION.** The plant was designed by Albert Kahn in 1925, in the late Model-T period, at a time when Henry Ford was attempting to decentralize assembly, aware that it was cheaper to ship parts that would pack tightly than automobiles which embrace great volumes of air. Shipping rates also were lower for parts. Curiously, a cultural fluke both reduced and increased the tour's interest. In accordance with a strong local tribal tradition, the entire workforce was off this day, the first of the fishing season. Thus nothing moved, which was too bad, but at the same time we were able to get our noses right up to, even inside, the assembly lines and the partially assembled light trucks that are the plant's sole product, in that sense seeing considerably more than if the lines had been alive. The only apparent major change in the process of assembling vehicles since the time of Ford and Kahn was the use of robots at certain stages, principally body welding. The coordination of the process now is fully computer controlled, of course, but the basic principal of getting the yellow fender to the yellow body is the same as that inaugurated by Ford using a variety of paper and other non-electronic programs.

The hydroelectric plant on the Mississippi, built contemporaneously, was a model of the period, and continues in operation today with its original four vertical turbine-generator units, supplying all power for the plant and selling excess to the local utility as well.

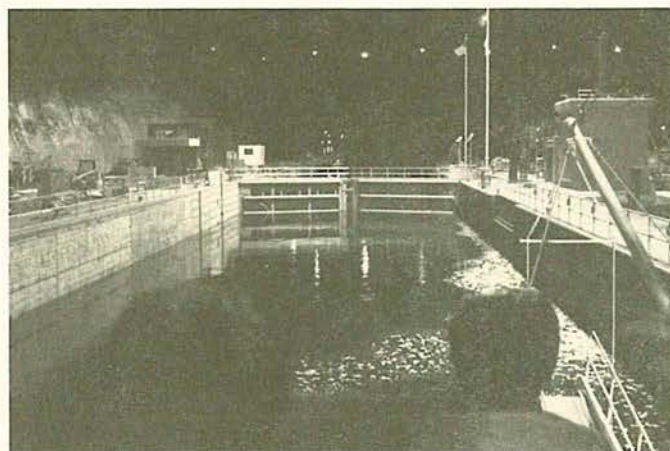
**THE MENDOTA BRIDGE** (NR, 1925-26), seen from a scenic overlook, was the tour's ultimate highlight and is featured on the conf. poster. In a land of bridges it stands as the epitome of the reinforced-concrete-arch type, the masterwork of two of the

leading figures of the school, C.A.P. Turner and Walter H. Wheeler. The bridge's 13 arches soar high above the Minnesota at its confluence with the Mississippi, in the shadow of historic Fort Snelling, forming what at the time was the longest continuous concrete-arch bridge in the world at 4,119 ft.

**FRIDAY EVENING ABOARD** the diesel-hydraulic stern-wheeler *Jonathan Padelford* (125' long, 24' beam, built 1970). Participants who had been busy busing all day had the opportunity to confer with colleagues and make new acquaintances while dining and experiencing Life on the Mississippi. Nick Westbrook's commentary from the pilot house informed our observations of sites on both banks. (An extraordinarily helpful, clever, and otherwise indispensable adjunct to this conference was the inclusion of index sheets for each portion of the tour, providing page references from the *Guide* for specific sites on Friday's process tours, the Friday evening cruise, and Saturday's flour-milling district tour. This device was but one of the factors that made this conference such a rousing success.)



Aboard the *Jonathan Padelford* for the Friday banquet-cruise. Above: Downtown St. Paul is framed by the High Bridge (1889, NR), a delicate 2,770-ft. wrought-iron bridge slated for replacement. Below: Members found nighttime lockage on the Mississippi to be quite an experience. Here, the *Padelford* locks through Twin City Lock & Dam #1 (1910-17, 1931-33, 1983); at the dam's east end is the Ford hydro plant.



With Nick's narrative, our guidebooks, and the index sheets to identify what we saw, we cruised under six historic bridges and passed twice through Mississippi River Lock No. 1 at the Ford Dam, the mid-point of our trip. Other sights included the American Hoist & Derrick plant (1896), the Grain Terminal Association reinforced-concrete elevator (1916), and Minnesota Harbor Services' barge-cleaning operation. St. Paul's levee and warehouse were visible, as were several power plants.

**SATURDAY MORNING'S PAPERS** and lunch occurred in the splendidly refurbished Landmark Center, St. Paul's Federal Courts Building (NR, 1894-1904). Only the substantive content of the excellent papers kept our attention from wandering to the mouldings, chandeliers, and fine plaster and woodwork of this truly "Landmark" quality renovation. It was generous of the organizers to think of scheduling a session there to enable us to enjoy the building.

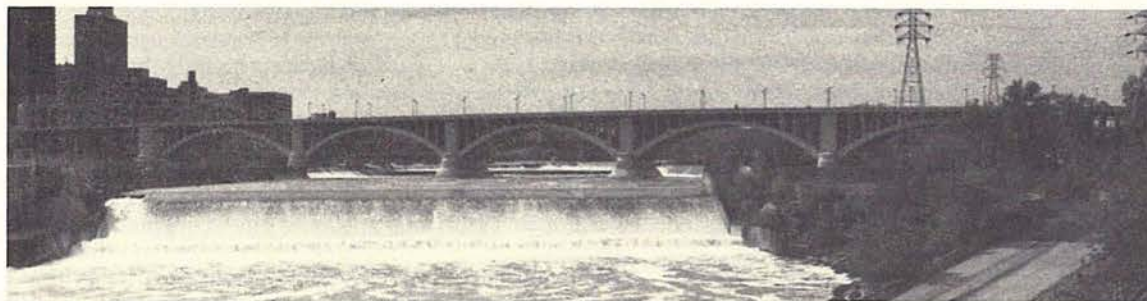
**SATURDAY AFTERNOON'S TOURS** of the St. Anthony Falls Historic District (NR), including the Minneapolis flour-milling districts, separated the group into three sections which saw

Friday lunch is served in the shade of the Pioneer Steel Elevator's 145-ft. "working house" (Minneapolis, 1901), reportedly the first all-steel house built. Steel grain tanks, flanking the house, are served by conveyors above and below. R. Frame photograph.





The Falls of St. Anthony, an energy source since the 1820s. Downtown Minneapolis is at the west (L) end of the Third Ave. Bridge (1914-16).



the same sites but in staggered order. Beginning on the East Side Milling District, incorporated in 1855 as St. Anthony, the tour included sites of saw mills as well as flour mills and other manufacturing sites. Indeed saw milling was the main activity on the east side, historically, although the area suffered several fires, and the industry relocated to North Minneapolis in the late 1880s. Today the east side district is dominated by the impressive limestone facade of the Pillsbury "A" Mill (NHL, 1881).

The hardier folk trudged on to perambulate the 2,100 feet of James J. Hill's famed Stone Arch Bridge (NR, 1883), built for his St. Paul, Minneapolis & Manitoba. The rails are gone; two arches of the bridge have been replaced by steel trusses to provide clearance for river traffic to the Upper Lock & Dam (1963), but the sweeping S-curve of the alignment and the handsome masonry remain an impressive sight. Has SIA ever crossed the Mississippi on foot before, *en masse*?

The West Side Milling District (incorporated 1855) likewise contained diversified industries—25 flour, saw, cotton, woolen, paper, iron, and woodworking mills before 1870—but by 1880 technological progress in the form of the 'New Process' and midlings purifier caused great expansion of the milling industry with 17 new flour mills established. Of these, five major sites (all NR) remain: The Crown Roller Mill (1880) with a distinctive Mansard roof and dated name plaque; the Standard Mill (1879); the North Star Woolen Mill (1864); the Washburn (later General Mills) "A" Mill (NHL), built 1879 on the site of the mill destroyed by a flour-dust explosion in 1878 — a memorial plaque commemorates the men who lost their lives; and the Humboldt Mill (1878), also

destroyed in the Washburn explosion but rebuilt in only six months.

On the way back to the bus we walked through the 600-ft. 1897-1899 long span, metal truss roof train shed (NR) of the Milwaukee Road (one of 12 extant in the U.S.), and past its 1879 freight depot and later passenger station. We were too early for dinner at the First Street Station restaurant, built as the Minneapolis Eastern Engine House (NR, 1902), so we boarded the bus to return to St. Paul.

A reception hosted by the James J. Hill Papers at the elegant Hill Reference Library preceded the evening's open "show & tell" program of slides, films, and commentary from the membership.

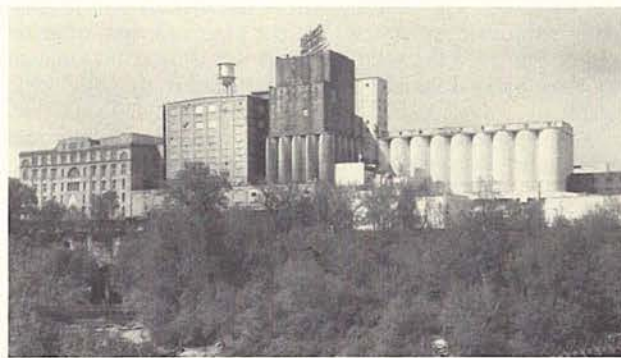
**ON SUNDAY PAPER SESSIONS** continued both morning and afternoon. Then it was time to say good-bye to the Twin Cities and the premier team of organizers who made the conference such a success. Nicholas and Virginia M. Westbrook, Robert M. Frame III, John M. Wickre, and Timothy C. Glines produced a program, publications, and overall organization of the highest order, one that will be difficult to match in years to come. We all owe them a vote of thanks and high praise for hard work and thoughtful planning.

R.M.V./H.E.W.

*Editor's Note: Copies of the extraordinarily comprehensive Guide to the IA of the Twin Cities (Nicholas Westbrook, Ed.) are available at \$15 (133 pp., illus.), posters at \$5, both ppd., and lists of conf. participants, free, from John M. Wickre, Minn. Historical Society, 1500 Mississippi St., St. Paul 55101 (612-296-6980).*



**MINNEAPOLIS' EXTRAORDINARY LANDMARKS.** Left: Members amble across James J. Hill's Stone Arch Bridge (1883) and view the Washburn Crosby (later Gen. Mills) mill complex (1880+, NHL). To right of elevators is the Washburn A Mill. Right: Pillsbury A Mill complex (1881+, NHL). Tailrace exit is below the A Mill (L).



## WORKING PLACES — BRITISH STYLE

There is now considerable experience throughout Britain on the adaption of industrial buildings from large textile mills to small engine houses, to a wide range of uses including workspace, residential, and recreational uses. This has now been assembled in two forms for planners, community groups, amenity societies, developers, and others concerned with adapting old buildings to new uses. A guide has been produced, researched by URBED and published by Capital Planning Information, price £3.00, available from Capital Planning Information, Ltd., 6 Castle St. Edinburgh, Scotland, EH2 3AT. It contains chapters on finding new uses, taking stock of space, and examples of reuse. The case studies which form the bulk of the guide feature 23 classic examples of different kinds of buildings and use. They explain how the scheme was implemented and financed. In association with this booklet, a video film has been published by the Industrial

Buildings Preservation Trust and funded by the National Westminster Bank. The program is 18 minutes long and utilizes 190 slides. Copies are available from the Industrial Buildings Preservation Trust, 359 The Strand, London WC2 on a variety of video cassettes. In addition, the program can be shown as an AVL audiovisual presentation or as a selection of 48 key slides with commentary. Prices are available from the Industrial Buildings Preservation Trust. — *AIA Bulletin*

### CONTRIBUTORS TO THIS ISSUE

Eric N. DeLony, HAER; Mark Edwards, Md. Hist. Trust; Michael B. Folsom, Chas. River Mus. of Industry; Carol Poh Miller, Ernst & Whinney; Peter M. Molloy, Western Mus. of Mining & Industry; Dianne Newell, Univ. of British Columbia; Stephen Victor, New Haven, Conn.; Robert M. Vogel and Helena E. Wright, Nat. Mus. of Am. Hist.



# CONFERENCES '84 — IA GALORE

## 1984 SIA ANNUAL CONFERENCE

The 13th Annual Conference of the SIA in 1984 will be unusual, if not unique, in the history of scholarly and professional gatherings. It will be one of three interlinked conferences meeting consecutively, in a ten-day extravaganza of industrial history and industrial archeology.

The program starts June 7 in Lowell, Mass. [site of the 1976 SIA conf.], with the annual "Lowell Conference on Industrial History," sponsored by the Nat. Park Service, Lowell Historic Preservation Commission, Lowell Museum, and Lowell Univ. This conference is immediately to be followed by the triennial meeting (June 8-14) of the International Committee for the Conservation of the Industrial Heritage (TICCIH), which will begin five days of meetings and tours in Lowell and other points, concluding in Boston [see article on TICCIH, below]. The SIA Annual Conference will open the evening of June 14, last day of TICCIH affairs, and run through June 17.

All three meetings are open to SIA members although [as the TICCIH article below notes] U.S. representation at the TICCIH meetings will be limited. A special Endurance Award is being considered for stalwarts who actually attend all three from start to finish.

The SIA took the lead in organizing this marathon (triathlon?) by inviting TICCIH to hold its 5th triennial meeting in the U.S., and by arranging for the Lowell Conference to be coordinated with the SIA schedule. All of the gatherings are in June (late for the SIA) so that conference costs can be held down by arranging housing in dormitories. Thus, relatively inexpensive quarters will be available outside the convention hotel for the SIA conference for the first time.

Paper sessions and tours for the three meetings also are being coordinated. The Lowell and TICCIH conferences will generally avoid greater Boston as a source of paper subjects and tours. For the most part, the SIA paper sessions will seek out topics of particular IA interest. Taking off from the site of the 1984 conference, two major sessions will be "The Archeology of the 'Post-Industrial' City" and "Boston's Role in the Industrialization of the U.S." Other topics remain under consideration as *SIA* goes to press. More information appears with the Call for Papers included in this *Newsletter* mailing. The contact for the SIA Annual Conference program is Mike Folsom, Charles River Museum of Industry, 154 Moody St., Waltham, Mass. 02154 (617-893-5410).

M.B.F.

## LOWELL INDUSTRIAL HISTORY CONFERENCE

The 1984 Lowell Industrial History Conference will be held at the Univ. of Lowell on June 7 and 8. The present plan is to offer an international perspective on all of the five established themes of the Lowell National Historical Park: The Industrial City, Labor, Capital, Machinery, and Power. For more information contact Robert Weible, Lowell National Historical Park, 171 Merrimack St., Lowell, Mass. 01852.

M.B.F.

## TICCIH: INDUSTRIAL HERITAGE '84

Industrial Heritage '84, the fifth international conference on the conservation of the industrial heritage (TICCIH), will be held in New England, June 8-14, 1984. The SIA and its Southern New England Chapter are hosting the gathering. Organizers plan an innovative combination of excursions and working sessions to relate themes and specific sites.

Registration will be the evening of June 8 at the Univ. of Lowell, followed on June 9 by the General Assembly opening session and a preliminary working session.

Tours of Lowell will be organized for June 10 focusing on the

city's 19th-C. industrial development. As a planned corporation town, Lowell displays factories, housing, and an extensive hydraulic canal system, all designed and built by the waterpower and textile-manufacturing interests that organized the community in 1822. The Lowell National Historical Park is the nation's first urban national park, interpreting industrial heritage in the heart of a busy city. Today Lowell is part of what Wellesley College economics professor Marshall Goldman calls "the re-industrialization of Massachusetts," which, with its focus on high-tech electronics firms, he refers to as "the Japan of the U.S."

A choice of three excursions will be offered to delegates for Monday and Tuesday, June 11 and 12. Each features a special forum bringing participants together with community leaders, historians, and educators to discuss the use of the industrial heritage in urban revitalization. Available are:

**I. North Coast: Mass., N.H., Maine.** Includes 19th-C. shoemaking and 17th-C. ironmaking sites; textile manufacturing towns—workers' housing and waterpower sites; 19th-C. brickyard and boatyard; Maine Maritime Museum at Bath and Bath Iron Works shipyard.

**II. Merrimack Valley in Mass. & N.H.** Continues theme of corporation town introduced at Lowell; includes other communities built on that model—Lawrence, Mass., Nashua & Manchester, N.H. Also features hydraulic power sites, workers' housing, Merrimack Valley Textile Museum and a high-technology manufacturing plant.

**III. Southeastern Mass. & R.I.** Includes tours of operating factories making lace, jewelry, cut nails; large-scale manufacturing city of Fall River, Mass., to compare with small factory towns in R.I.; Slater Mill Historic Site—1793 cotton mill/museum with 19th-C. machine shop and reconstructed water wheel.

Following the tours, participants will meet in Cambridge for topical working sessions at MIT on Wed. and Thurs., June 13 and 14. Each delegate will prepare remarks for one of the working groups, with abstracts distributed in advance. Working groups are: Interpreting the Industrial Heritage; Appropriate Technology; Workers & Artifacts; Ideology in Industrial Archeology; Public Policy & the Industrial Heritage; Reuse: Industrial & Adaptive; 20th-C. Industry; Industrial Communities; Subsurface Investigation: Land & Sea; Technology Transfer; Architecture & the Industrial Heritage.

English, official language of TICCIH, is the conference language. Registration is \$300 (U.S.), covering meals, lodging, excursions, and publications. Information about selection of U.S. delegates is available from Conf. Coordinator Stephen Victor, 166 E. Rock Rd., New Haven, Conn. 06511, or from the U.S. National Representative of TICCIH, Helena Wright, Div. of Graphic Arts, Rm. 5703, Nat. Mus. of American History, Smithsonian, Wash. D.C. 20560. The Canadian Nat. Rep. of TICCIH is Dianne Newell, Dept. of History, Univ. of B.C., Vancouver, B.C. V6T 1W5.

The Conf. Organizing Committee includes Michael Folsom, Patrick Malone, Paul McGinley, Matthew Roth, Stephen Victor, and Helena Wright; tour organizers are Laurence Gross, Paul Hudon, Patrick Malone, Charles Parrott, Eric DeLony, and Robert Vogel; Program Chairman is Ted Penn [all SIA].

The committee reports financial assistance from the Mass. Council for the Arts & Humanities, the Mass. Historical Commn., the Theodore Edson Parker Found., and the SIA. Sponsors other than the official hosts, SIA and SIA-SNEC, include Lowell Hist. Pres. Commn., Lowell Mus., Lowell Nat. Hist. Park, Mass. Dept. of Environmental Management, Mass. Executive Office of Economic Affairs, Mass Heritage State Parks Program, MIT, and Univ. of Lowell.

S.V.



# RAILROAD SHOP PROJECTS STEAM UP FOR REHAB

While the planning of adaptive reuse projects always seems to tax preservationists' ingenuity, railroad shop facilities, often exceedingly vast and complicated acreages of buildings and structures, are particularly difficult. Currently, several promising plans are in the works—or even under way—in Vancouver, B.C., Aurora, Ill., St. Paul, Minn., Savannah, Ga., and Spencer, N.C. The Maryland Historical Trust, meanwhile, seeks a developer for a 1901-02 enginehouse. (See Eric DeLony's detailed account of Savannah's Central of Ga. RR shops project in a related story.)

In Vancouver, preservationists cross their fingers, stifle anxiety, and wait for their temporarily vanished Canadian Pacific Rwy roundhouse to reappear as a pavilion in the city's planned Expo 86, a world transportation fair. An 18-month preservation battle ended this May when Expo officials announced a \$5 million back-to-the-original restoration program involving brick-by-brick disassembly, storage, cleaning, and remortaring. Following CPR drawings and original photos, Expo wants to rebuild all of the semi-circular repair bays, the machine shop, and the turntable. Parts of the complex date to 1888.

By mid-summer the site was empty. The roundhouse was heading for storage, now transformed into piles of brick. Knowing the unpredictability of the economic future, those who struggled to save the building hope that it will indeed be rebuilt and not fall victim to budget cuts or other difficulties.

The save-the-roundhouse battle began in Dec. 1981 when bulldozers began tearing down surrounding outbuildings. Formed to fight demolition was the Friends of the Roundhouse Society, led by architect Linda Moore who recently was given a heritage award by the city for her work in attempting to save the complex. "This has been quite a struggle," reports city resident Dianne Newell (SIA). "For a while it looked as though the most we could expect was the preservation of a slice of the pie."

Immediate plans are for the new/old roundhouse to be one of four theme pavilions on the Expo 86 site, dedicated to "man in motion." Pavilion expenses will add an estimated \$13.75 million to the rehab costs. After the fair, the 55,000-sq.-ft. "better-than-mint condition buildings," according to an Expo 86 official, will become a community and retail center.

In St. Paul, meanwhile, work is well along at the Northern Pacific Ry (later Burlington Northern) Como Shops which last year were taken over by the local, nonprofit Amherst H. Wilder Corp. AHW is overseeing the development of a 218-acre Energy Park which includes the shops complex (viewed on a drive-by during the Saturday tour at the recent SIA Annual Conf.).

Originally built in 1885, the cream-brick and limestone Como Shops were the only passenger car shops operated by the NP east of the Rocky Mts. A major part of the complex now is undergoing conversion to what has been christened "Bandana Square," a self-consciously nostalgic RR-motif retail center. Whatever one thinks of the name, AHW has managed to retain and externally restore the significant buildings, including erecting, paint, and new-car shops, office and store room building, and an elaborately chimneyed blacksmith shop. Ironically, the only displaced tenant following BN's departure from the site was the Minn. Transpor-

tation Museum, which had been allowed to use a now-raised structure as storage and repair space for historic locomotives and rolling stock. A variety of uses will occupy former shop buildings outside the Bandana Square area. Already open for business is a health maintenance organization whose medical facilities are comfortably lodged behind huge round-arched doors which until recently admitted BN rolling stock.

In a large area adjacent to the shops, Energy Park is completing construction of 950 units of housing in multistory structures whose monitor roofs and arched windows successfully emulate their restored 19th-C. industrial neighbor. Also planned is an Energy Technology Center designed to "serve as an incubator for energy-related businesses" by providing office, laboratory, and conference space. Energy Park, AHW boldly projects, will give St. Paul 6,000 permanent jobs and perhaps even a trolley line to connect Bandana Square with a not-too-distant city park. Already, however, Toltz, King, Duvall & Anderson, a major St. Paul engineering firm, has won state and national awards for their design of Energy Park's district heating and cooling system.

Languishing in the rehab shadow of the Como Shops are St. Paul's nearby Jackson Street Shops, built in the 1880s for the Great Northern Rwy. Still owned by BN, which seems to have little interest in their future, these striking limestone buildings (also viewed on the bus driveby) unhappily are situated in a neighborhood whose present redevelopment potential is obscure at best. The noisy success of the Energy Park-Como Shops project may well dim the prospects for another costly RR shops undertaking in the same city.

Burlington Northern occupies preservation's center stage in Aurora, Ill., where BN's Chicago, Burlington & Quincy roundhouse and shops are about to become part of a mass transporta-



The CB&Q stone roundhouse in Aurora, 1977. *Aurora Preservation Commn. photograph.*

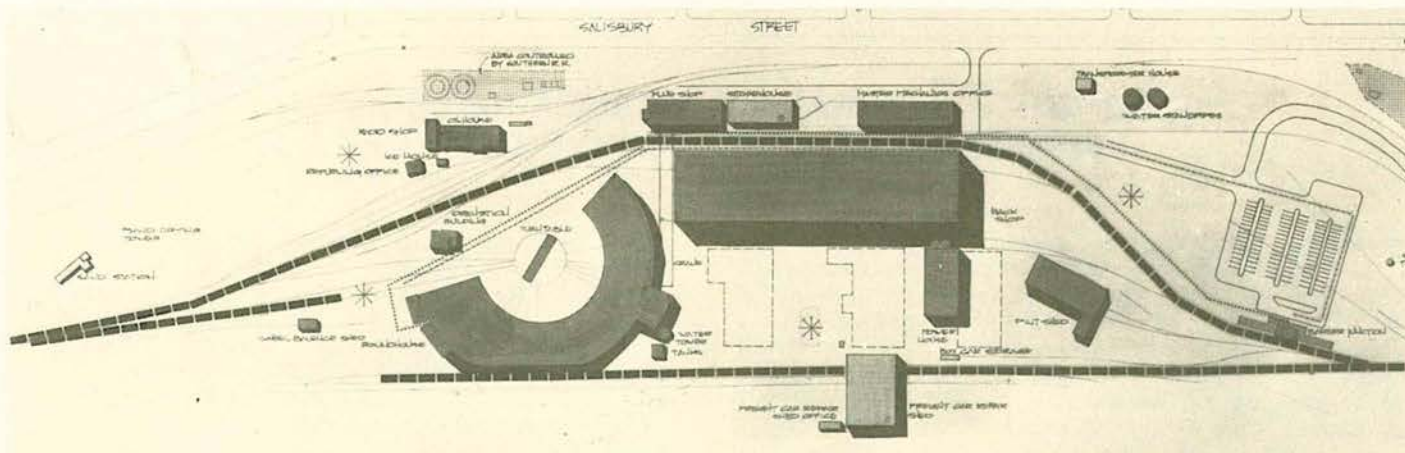
tion center. The CB&Q's Aurora buildings, begun in the mid-1850's, were the line's first permanent shops and, when completed, included the present full-circle stone roundhouse and ten interconnected stone and brick shop buildings. The prototype of the famed Burlington Zephyr was designed here. All RR repair work ended in 1974 although BN has continued to retain ownership.

At the moment the site is undergoing a HAER-supervised documentary survey including photos, diagrams, and data for a future scholarly narrative, according to Greg Kendrick of the Nat. Park Service's Rocky Mt. Regional Office. Measured drawings



"Chicago, Burlington & Quincy R.R. Car Works." Ambrotype, 1859. *Aurora Historical Museum.*





Southern's Spencer Shops: site plan of 57-acre complex.

already exist, prepared for the reuse project which will begin a few months after HAER's early 1984 windup.

The new transit complex will combine a BN terminal and office space with a city bus "pulse point" and an Amtrak station, all developed by a cooperative venture of BN, the City of Aurora, and Ill. Dept. of Trans., with Urban Mass Transit Admin. financing. Ironically, the roundhouse itself—a key structure in this National Register complex—still seeks a developer, according to Aurora Pres. Commn. Executive Director Patricia Casler, although it is being stabilized. Of national significance, the 240-ft.diam. building is thought by HAER to be the earliest full-circle roundhouse extant in the U.S. and one of only four known 360-deg. survivors. It is also among the nation's few remaining stone roundhouses.

Move south now to Spencer, N.C., where the N.C. Dept. of Cultural Resources this spring opened "People, Places and Times," its first major transportation exhibit at Spencer Shops State Historic Site. The former Southern Ry shops, where steam locomotives and railway cars were repaired, and large trains were made up and dispersed throughout the South, was the most significant RR repair and staging facility in the south for nearly 60 years. (Visited on 1980 SIA Fall Tour.)

The Southern built its first roundhouse at Spencer in 1896, and in subsequent years added a modern locomotive repair shop, boiler shop, car plant, planing mill, and freight car repair shop. By 1938 the Spencer operations had become the largest repair and transfer facility in the Southern system, which once employed nearly 3,000. Up to 100 locomotives a day could be serviced at the 168-acre facility, which gradually declined in importance with the advent of the diesel.

In 1960 the shops were closed and by 1976 demolition plans had surfaced, a reality which prompted state and community concern for preservation and reuse. After considerable study, retail shopping mall plans were deemed inappropriate and a museum concept proposed earlier was reconsidered.

Southern, in 1977, donated some 54 acres and nearly a dozen buildings to the state for historic museum use, including the large machine shop, boiler house, storehouse no. 1, and office complex. The new exhibit is housed in the storehouse which was built in 1907 and became the primary parts distribution warehouse for the entire Southern system. Not only can museum visitors tour the

exhibit and preserved rolling stock, but they also can view restoration work under way at several shops buildings.

In Maryland, the Historic Preservation Commission of Prince Georges Co. awaits a developer. Here, in the City of Seat Pleasant, is the Chesapeake Beach Ry's 1901-02 enginehouse, last remaining CBR structure in the county. Although determined eligible for the National Register, the city owners plan to raze the one-story, C-shaped brick building if no reuse can be found. So far, the Maryland Historical Trust has worked in vain to locate a developer, according to Deputy SHPO Mark Edwards (SIA).

The CBR was the work of 19th-C. Colorado RR pioneer Otto Mears who fantasized a luxurious gambling and beach resort on the western shore of the Chesapeake Bay. This hoped-for rival of Newport, Narraganset Pier, and Bar Harbor would be served, of



Chesapeake Beach Ry enginehouse, Seat Pleasant, Md., in 1978. John M. Walton, Jr., photograph.

course, by Mears's CBR. The road was bankrolled by western entrepreneurs, primarily Denver Banker David Moffat. The present day Seat Pleasant area was the RR's principal yard and shop site, with the enginehouse all that survives.

While inviting a very modest project compared to the sweeping multimillion-dollar plans afoot at shops complexes elsewhere, those working on the CBR site are finding the development work about as difficult. In fact, it may be more so, since the small scale of things does not attract the attention of large public and private institutions and developers.

(Editor's Note: For those interested in further information about the above projects contact the following: Vancouver—Dianne Newell, Dept. of History, Univ. of B.C., Vancouver, B.C. V6T 1W5; Como Shops/Energy Park—AHW Corp., 1100 Northwestern Nat. Bank Bldg., St. Paul, Minn. 55101; CBQ Shops—Patricia J. Casler, Aurora Pres. Comm., 44 E. Downer Pl., Aurora, Ill. 60507; Spencer Shops—Michael C. Wells, Spencer Shops State Historic Site, P.O. Box 165, Spencer, N.C. 28159; CBR Enginehouse—Mark Edwards, Md. Historical Trust, Shaw House, 21 State Circle, Annapolis, MD. 21401.)

CB&Q roundhouse in 1955 aerial view. Aurora Historical Soc.





## SAVANNAH'S CENTRAL OF GEORGIA RAILROAD SHOPS TARGETED AS TOURIST, CONVENTION CENTER

*Fourth in a Series*

Atop 40 acres of landfill at Savannah's western edge are the former shop and terminal facilities of the Central of Georgia RR. When completed in 1855, the complex was recognized by the RR industry as "the most complete and elegant railroad station in the country." Today the shops and terminal facilities remain almost totally intact and are the object of a tourist, convention, and park development project proposed by the Parsons Brinckerhoff Development Corp. of New York City.

Marked on the Savannah skyline by a 120-ft. smokestack that once functioned to exhaust the forges in the blacksmith shop and the enginehouse boiler, the site is located at a strategic crossroads to the city. The stack is visible from the I-16 ramp coming into the city from Macon and Atlanta, and from the Talmadge Memorial Bridge over the Savannah R. that brings traffic in from Charleston, S.C. Savannah is well known to historians of city planning, architectural historians, and historic preservationists primarily for its urbane layout of gridded streets punctuated by 20 exquisitely landscaped squares that controlled urban growth for 125 years; for one of the richest collections of architecturally distinct buildings of any U.S. city; and for being one of the first cities to adopt local legislation that recognized and protected this legacy. More recently, the city has come to appreciate what was largely responsible for its fine architecture—the RR that brought thousands of cotton bales from the hinterlands and made Savannah one of America's important 19th-C. port cities.

Recognition of the Central of Ga. shop and terminal facilities was due in part to a 1975 HAER-initiated survey of the site. The HAER team established that this RR facility, based on the plans of supt. William M. Wadley, was one of the most intact antebellum RR shops complexes to survive in the nation. As such, the site was designated a National Historic Landmark in 1978.

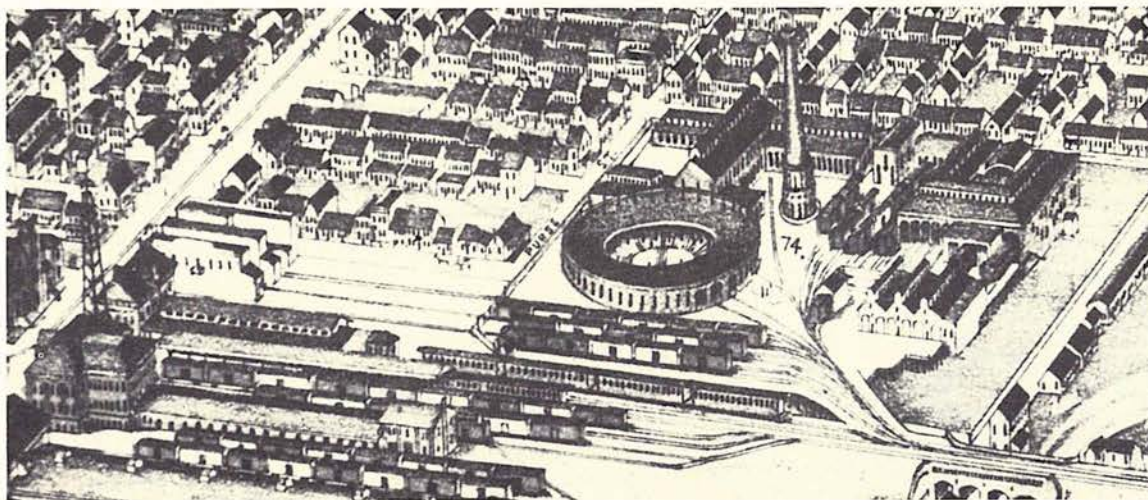
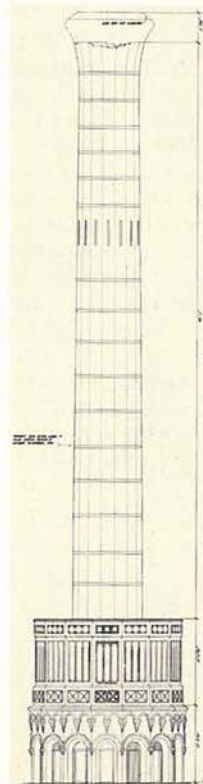
The Chatham Co.-Savannah Historic Site and Monument Commn. may be credited with saving the buildings in the first place. The shops had been abandoned in 1966 by the Southern Ry which had gained control of the Central during the Depression. In 1968, when the buildings were threatened with demolition for the Savannah gray bricks they contained, the Commission purchased 5.6 acres from the salvage contractor for the price of the bricks. The city acquired the buildings from the Commission in 1973. Early in 1975, the city retained the services of Land Design/Research, Inc. of Baltimore to prepare a preliminary plan and development proposal for the "Savannah Bicentennial Park." The park was slated to be the focal point of the state's Bicentennial celebration, and a prominent entry point into the

downtown historic district. Hoping to capitalize on Bicentennial funding, planners chose to emphasize not the historic RR buildings but the fact that, under many feet of fill, this was also the site of the Revolutionary War Battle of Savannah; they recommended demolition of several buildings. This rivalry for primary significance between the RR era and the Revolutionary War event has remained a continuing theme through all subsequent proposals. The emphasis on the battlesite by the Land Design/Research planners was an important element.

The HAER survey of the same year (1975), however, established the significance of RR developments and pointed up the severe deterioration of the buildings. Over the next two years the city moved rapidly to stabilize the fragile remains of the shop buildings. Paul Hansen Architects/Land Planners prepared plans and specifications for structural restoration and stabilization and proposed a feasibility study for the eight buildings on the tract. These actions prevented total deterioration and subsequent demolition as a public health hazard, kept the shops' plight in the public eye, and bought precious time until the next phase of study and development could be implemented.

Meanwhile, in 1974, the 1876 passenger station and 1861 train shed across the street from the shops had been restored for reuse as the Savannah Visitors Center and offices for the Chamber of Commerce. Then, three years later, enter another building and another plan. The Advisory Council on Historic Preservation recommended that the federal General Services Admin. (GSA) acquire and renovate the Central of Ga.'s former administrative and engineering offices that were located in what is known as the "Red Building" [built in 1887 to provide additional offices, it was constructed of red pressed brick]. The plan's intent was to implement the Public Buildings Cooperative Use Act of 1976 (introduced by Rep. "Bo" Ginn, D-Ga.) by renovating the Red Building as federal office space for the Army Corps of Engineers, who had

CENTRAL OF GA. RR SHOPS. Below: In this 1891 birdseye view, offices, depot, and yards are at lower left; motive power dept. surrounds smokestack. Roundhouse was razed in 1927. Right: The incredible (and elegant) stack, water tank, and privy combo. HAER drawing, 1975, by John Gregory Albers.





outgrown their existing downtown building. The new law introduced a fundamental shift in federal building policies by directing GSA to acquire and rejuvenate buildings of historic or architectural significance and convert them into federal offices. Local businessmen narrowly rejected this Advisory Council/GSA suggestion, thinking that the buildings were too far from the central downtown complex four blocks away.

The most recent phase of efforts to preserve the shops is by no means the final one. Two more studies were completed in 1980 and 1981, one on the feasibility of adaptively reusing the RR building by the Parsons & Brinckerhoff Development Co. (P&B),



Central of Ga. Machine Shop, during 1975 HAER recording. Rapid deterioration raised the city's concern. At left is smokestack's privy-base. *Eric DeLony photograph.*

the other on the archeological remains of both the Revolutionary War era and the RR period. The P&B economic feasibility study varied somewhat from the previous Land/Design Research plan by focusing on the rehab potential of the RR shops. It did not recommend reconstruction of the actual battlefield, but suggested that commemorative measures be taken to recognize the event. The archeological study, conducted by Edward Rutsch [SIA] of Historic Conservation & Interpretation, Inc., corroborated this decision, finding below ground only significant RR, not Revolutionary War, remains.

The P&B study proposed a combination Battlefield Park-History Orientation Center, specialty retail space, hotel and convention facilities, a performing arts center, offices, and private townhouses. The scheme was based on extensive research and evaluation of the marketing, economic, tourist, and housing patterns of Savannah. The study concluded that the city, though a strong regional retail center, loses as much as \$111 million in potential sales of quality goods to Atlanta; that employment and economic growth in the city were slightly below the state level and notably lower than in S.C.; that the city experienced significant growth in tourism and shows potential for a healthy convention business; and that there is demand for convenient apartment or condominium housing downtown. Hence, the P&B recommendation. Total development costs were estimated over \$80 million during the three phases of development.

Two important points emerged from the P&B study. The analysis clearly demonstrated the necessity for a development that would pay for itself. Debate on the study also revealed that the Southern RR maintains major control of the tract, owning over twice as much acreage as the city and thus still having a powerful say in any outcome.

Critics charged that the plan, in proposing retail space with hotel and convention facilities, would fragment and devitalize central downtown shopping located only a few blocks away. Moreover, said opponents, the site's RR history would not be interpreted. The scheme was termed "a shopping mall with historical themes."

The P&B study, finalized while Rutsch's dig was under way, did not include information from the archeological findings which, ironically, located the major portion of remains in the area eyed for retail redevelopment. Here were found remnants of the underground flue system, drainage and mechanical service con-

duits, and foundations of the forges, cranes, and forging hammers in the blacksmith shop.

Where does this leave the elegant Central of Georgia RR shop complex, certainly one of the most intensely investigated industrial sites in the country? There have been no less than three adaptive reuse feasibility studies, two historical surveys, and several limited projects. All the redevelopment proposals have generated controversial reactions within the community. With the current bleak economic climate, the prospect of anything happening in the immediate future seems rather remote, although plans are moving ahead to rehabilitate the Red Building and cotton warehouses for offices and townhouses. There also are plans to restore the magnificent smokestack and polychrome the cast-iron 40,000 gal. watertank that sits atop the 16 brick privies that form the chimney's base. Experience has taught that projects of this scale and complexity do not happen overnight and that it is often better to advance incrementally.

*E.N.D.*

## CURRENT RESEARCH

Several research projects of IA interest are reported in the March Society for Historical Archaeology *Newsletter*.

**SAINT-MAURICE IRONWORKS, QUEBEC.** The Forges du Saint-Maurice National Historic Site were the subject of two projects in 1982 by the History & Archaeology Unit of Parks Canada, Quebec Region. The ironworks was a center of industrial activity from 1733 to 1883 and probably was the only site in French N. America prior to 1760 where ore was transformed into cast- and wrought-iron products. Excavations generated by a proposed visitors' parking lot produced evidence dating to mid-18th C.

**GRANITE MFG. CO., MARYLAND.** Further archeological work is recommended at the site of the Granite Mfg. Co.'s 19th-C. textile mill on the Patapsco R. at Ellicott City. Partially excavated, the site was found to be relatively intact despite flooding. Major discoveries to date include a stone coal-oil gas storage tank, foundations of an 1816 nail factory, and the water-power systems for the complex.

**PHOENIXVILLE, CONN.** Excavations have been conducted at several sites relating to the early 19th-C. mill village of Phoenixville, including the Latham house, built as company housing by the Sprague Mfg. Co. in the early 1820s. Additional preliminary excavations undertaken at the Phoenix Mill [HAER], a stone textile mill built by the Phoenix Mfg. Co. in 1823, will serve as the basis of a Univ. of Pa. dissertation by David Simmons. The other work was conducted by Old Sturbridge Village crews under John Worrell.

**PERSONAL —** Old Crane, lonely, seeks Good Home. Body aging but tubes are GREAT. Friendly service. Discreet.

Built in 1928, this Brownhoist coal-fired steam crane (type DC-S S/N 5181, 15-ton cap.) was still chugging away in the late 1970s, building docks, etc., on Cape Cod and the Islands. The 1941 boiler was retubed in 1969 and the original operating instructions and parts catalog still exist. Jonathan Leiby, 43 Nobska Rd., Woods Hole, Mass. 02543 (617-540-3276).





## NOTES & QUERIES

**SLATER MILL HISTORIC SITE**, Pawtucket, R.I., will construct a fully equipped slide theatre and produce a multi-image slide show, thanks to a \$42,500 grant from Champlin Foundations. Named in honor of George S. Champlin, the 30-seat theatre will be built on the second floor of Old Slater Mill and is designed initially to present the new three-projector, computerized slide production. The 12-minute presentation, using 240 images drawn from the SMHS graphics collections and elsewhere, will give an overview of Pawtucket's industrial development.

**BEN'S MILL**, the film about Ben Thresher's waterpowered Vt. woodworking shop and forge produced by John Karol (SIA) of Oxford, N.H., received a 1983 Academy Award nomination. Screened at the 1982 SIA Annual Conf. in Harrisburg, "Ben's Mill" was one of five nominations in the "Best Documentary Feature" category. Karol, who journeyed to the April presentation only to return without an Oscar, reports that Ben continues to do what Ben does, although there have been a few "improvements" in the mill's power system, such as installing a concrete replacement for the wood penstock and forebay. Already the recipient of several other awards, "Ben's Mill" is available for sale or rental through Documentary Educational Resources, 5 Bridge St., Watertown, Mass. 02177 (617-926-0492).

**EIAA FELLOWS**. The Early American Industries Assn. named its first four Honorary Fellows during its 50th Anniversary celebration held June 2-4 at the Rochester Institute of Technology. The new Fellows are Brooke Hindle (SIA), Edward Durell, William Goodman (SIA), and Joseph Link. Also announced were 1983-84 \$1000 Grants-in-Aid for research to Deborah Ducoff-Barone, Phila. Museum of Art (Phila. cabinet-makers, 1800-40); Hugh T. French, Salt, Inc., Kennebunkport, Maine (Martin & Caraher Sardine Factory, Eastport, Maine); Barbara K. Hamblett, Mich. Historical Museum, Lansing (marbelized slate industry); Gregory H. Nobles, Va. Polytechnic Inst. & State Univ., Blacksburg (Western Mass. broommaking, 1790-1850), and Rob Tarule, Plimoth Plantation, Plymouth, Mass. (17th-C. wood-use technology).

**FULTON'S CLERMONT DRAWINGS**. Patent drawings for Robert Fulton's *Clermont* are on exhibit at The Mariners' Museum, Newport News, Va., through 1983, thanks to a long-term loan by the Am. Soc. of Mech. Engineers, owners of the 21 watercolors. These are copies of Fulton's 1809-10 patent specifications believed to have been sent to England to promote steamboat use there. In 1935 they were found in the London offices of *The Engineer* which then gave them to the ASME.

**NEW HAMPSHIRE TOOLMAKING**. A 1984 exhibit and catalog on New Hampshire tools and toolmaking is in preparation by the New Hampshire Hist. Soc., thanks to a \$22,900 grant from the National Endowment for the Humanities. The catalog will focus on the impact of industrialization on traditional trades and on the process of hand production of hand tools. NHHS welcomes any information on state tools and makers. Contact Jim Garvin, Curator, NHHS, 30 Park St., Concord, N.H. 03301.

**WHAT'S ETAOIN SHRDLU?** Printers might know ETAOIN SHRDLU as the phrase formed by striking the first 12 keys on a Linotype machine keyboard. The operator hit these keys to quickly finish a line which had an error in it. The slug then was discarded. On the last night that the hot-metal type process was used at *The New York Times*, a film was made. It is called "Farewell ETAOIN SHRDLU" and covers the paper's overnight switch to computer typesetting. Both processes are shown and workers are interviewed during the changeover. Having received

several awards and honors, the film is available for rental or sale from The Museum of Modern Art Circulating Film Library, 11 W. 53rd St., N.Y., N.Y. 10019 (212-956-4204).

## RESEARCH QUERIES

"I would appreciate hearing from anyone with information pertaining to, or artifacts from, the following firms: **Solvay Process Co.**, **Semet-Solvay Co.**, and the **Split Rock Munitions works**. I am trying to gather information on the subjects as a basis for both a historical collection and a book." Mark W. DeLawyer, Box 2107, 550 S. Clinton St., Syracuse, N.Y. 13202.

**MOVEABLE BRIDGES**. The Boston area reputedly was the origin of two now rare forms of moveable bridges. The "jack-knife draw" was designed by Joseph Ross, an Ipswich, Mass., contractor, for the Eastern RR in the 1840s (see Condit, *Am. Bldg. Art: 19th C.*). The last known example, still in use over the Mystic River, South Boston, has two "retractile bridges in which the moveable span is withdrawn on rails, diagonally away from the navigational channel." Both retractiles date from the 1890s. Are there other extant examples of either form? Were the forms ever used in other areas? Peter Stott, Mass. Historical Commn., 294 Washington St., Boston, Mass. 02108.

**VERMONT RR MUSEUM** seeks advice on preservation and reuse of its early-20th-C. Central Vermont RR roundhouse, either as a museum building or for other activities. The new museum also owns an 1892 Manchester (Boston & Main #494) locomotive and is looking for rehab funding for both projects. George Wenz, Vermont RR Museum, P.O. Box 306, White River Junction, Vt. 05001.

## AVAILABLE

**F.E. REED ENGINE LATHE**, 16 x 36, manufactured in Worcester, Mass. is available for the cost of removal from Monroe, Conn. The lathe is dated Sept. 4, 1888, but marked "Pat. 1891 4349 16A." Philip Bayer, Bayer Machine & Tool Sales, Inc., 205 St. Johns Place, Brooklyn, N.Y. (212-857-9690).

**HAMILTON-CORLISS ENGINE**, c1895 with 10 ft. flywheel, located in Carlyle, Ill., is available free to a legitimate museum or at a reasonable price to a collector. Must be removed soon. Jim Bolk, Jim Bolk Enterprises, 3rd & Methodist sts., Carlyle, Ill. 62231 (618-594-2437).

**SNOW-WORTHINGTON CROSS-COMPOUND PUMPING ENGINE (1917)** in good condition with a 13 ft. flywheel is available free to a "worthy recipient." David Jones, P.O. Box 255, Okemos, Mich. 48864 (517-349-4089) or Fred Blanck, Supt. of Water Production, Bd. of Water & Light, P.O. Box 13007, Lansing, Mich. 48901.

## WANTED

**BRIDGE WANTED**. A c1854-85 iron bridge is wanted for use as a pedestrian bridge by the Orange Co. (N.Y.) Hist. Soc. for their Clove Furnace Historic Site restoration project. Must be at least 60 ft. long, 8 ft. wide, and able to carry 2½ tons. M.P. Figliomeni, Pres., Orange Co. H.S., Clove Furnace Hist. Site, Arden, N.Y. 10910.

**3 BRIDGES WANTED**. Three replacement bridges are needed for Heritage Trail which uses the old Chicago Great Western grade near Dubuque, Iowa. Each should be at least 100 ft. long, 10 ft. wide, with a 15-ton cap. (less for one location) Significant historic highway bridges are desired. Douglas L. Cheever, Pres., Heritage Trail, P.O. Box 655, Dubuque 52001 (319-557-5871).



## MUSEUM NOTES

**TUGBOAT UPDATE.** Work on the **Baltimore Museum of Industry's** 1906 steam tug *Baltimore* is progressing thanks to about 20 volunteers [including Steve Heaver and Mark Ruhl, both SIA] and the generous support of local business. More than 50% of the restoration, comprising the dirty, heavy work, has been completed. Scheduled for this summer and autumn are the hydrostatic test of the oilfired 1922 Scotch boiler (containing two Morrison furnaces), restoration of four of the nine auxiliaries, installation of most of the electrical system, carpentry, and a probable first steaming. S.H.

**PA INDUSTRY.** The **Saylor Park Cement Industry Museum** in Coplay honors David Oliver Saylor (1827-1884), father of the American Portland cement industry, along with those who built the industry into one of the most important in the Lehigh Valley and the nation. Saylor organized the Coplay Cement Co. in 1866 to manufacture natural cement using limestone quarried nearby. He soon began experimenting with the manufacture of Portland cement, obtaining a patent in 1871. He died in 1884 before the American Portland cement industry had undergone substantial growth. Adoption of the rotary kiln after 1895 led to increased production and improved quality. Other Lehigh Valley companies were organized, and Lehigh District production shot from 201,000 bbls in 1890 to over 6 million by 1900—a year that the Lehigh District made 72% of all Portland cement used in the U.S. Visitors (N. 2nd St., Coplay) can view exhibits on the industry (incl. "evolution of the cement kiln") 1-4 p.m., Sat. and Sun., May through Oct. Free admission.

Other museums in Lehigh Co. include **Lock Ridge Furnace Museum** (Franklin St., Alburtis, Pa.), interpreting the iron industry [SIA/N May/July 76:7], and the **Haines Mill Museum** (3600 Dorney Park Rd., Cetrionia, Allentown, Pa.), an operating, turbine-powered flour mill.

**MORE MILLS.** At E. Meredith, N.Y., the **Hanford Mills Museum** staff completed major structural stabilization while moving toward the full restoration of waterpower operations using the extant 1925 Fitz wheel. At the same time, the grist and sawmill site, parts of which date to 1820, acquired the complete and fully operating woodworking shop of O.D. Greene Lumber Co., Adams, N.Y. Unlike the original woodworking machinery remaining inoperable in the Hanford Mills, the new acquisition was regularly maintained and in full production until the day last year when it was disassembled and moved to E. Meredith. Totaling some 5,000 pieces, the O.D. Greene shop includes 21 19th-C. machines, over 200 ft. of line shafting, and the complete company day books. Meanwhile, out in Los Gatos, Calif., the **Forbes Mill Museum** has opened in the stone shell of an 1850 waterpower flour mill built by James Alexander Forbes. What first was Forbestown (what else?) is today Los Gatos, and the Museum celebrates that local history. Said curator Alessandro Baccari in a fit of molinological enthusiasm, waving his arms around the mill's interior, "I love it, I eat it, I breathe it" (quoth the *Los Gatos Weekly*).

**RR PROJECTS.** At the **National Museum of Transport** in St. Louis, reopened in 1980 after a change in administration and construction work, an all-new 15,000-sq.-ft. RR interpretation and display building has been completed as part of an extensive renovation and restoration program. A major subject of restoration attention was the museum's 1943 Lima-built Southern Pacific 4-8-4 #4460.

In the Braintree-Weymouth area of Mass., the **Bay Colony RR's** 111-mile shortline has opened operations using another 1943 locomotive, a 125-ton diesel purchased for \$45,000. And electric

streetcar service comes to Seattle on the **Alaskan Way Street Car Project**. This "Waterfront Trolley" leases Burlington Northern track and sports newly constructed catenary for the 1½-mile run with restored cars.



## CHAPTER NEWS—ANNUAL WRAPUP

Highlights of 1982 activities by the active chapters come in a summary report from Thorwald Torgersen, local chapter coordinator:

**NORTHERN NEW ENGLAND.** The chapter reports that members were involved, in July, in the recording of the Concord, N.H., gas-holder for HAER (1888; SIA/N Fall 82:1). In addition, the chapter planned and hosted the fall 1982 tour of Maine coast IA sites. The spring meeting was held at Ben Thresher's wood-working mill (HAER) in Barnet, Vt. The fall meeting was at Frye's Measure Mill in Wilton, N.H.

**SOUTHERN NEW ENGLAND.** The spring meeting, with 65 attending, was held at the Charlestown Navy Yard (HAER) and included tours of the normally closed rope walk and the chain forge. The fall meeting was held at the Ledyard, Conn., Grange Hall. Included were tours of Saw Mill Park, the site of an up-and-down saw mill, and Clyde's Cider Mill at Stonington. Members are involved in the planning of the 1984 TICCII meeting.

**ROEBLING.** The chapter conducted two tours in 1982. The first included the Black River & Western RR at Flemington, and the George Green Garage and Machine Shop at Lambertville, N.J. The latter is an auto-era garage and machine shop seeking preservation resources. The second tour examined Morris Canal Plan No. 2 East and was coupled with the chapter's annual cornfest at Charles Emmerich's farm. The annual meeting, held at the ITT headquarters in Nutley, included a slide program on the history of the Thomas Edison Ore Concentration Plant at Ogdensburg, N.J. The second annual Symposium on IA was held at Drew Univ. in Madison, attended by 150.

**MONTGOMERY C. MEIGS ORIGINAL.** In March the chapter participated in the screening of the film "The Brooklyn Bridge" at the National Museum in Wash., D.C. MCMOC members also conducted a field trip in June to record Wilson's Bridge near Hagerstown, Md. [SIA/N Summer 82:8]. Drawings and photos were forwarded to HAER. The bridge is a 5-arch stone bridge leading to the old National Rd. Now abandoned, it is seriously deteriorated. The annual meeting in Nov. was the occasion for an after-hours tour of Building 10 at the Nat. Air & Space Museum facility at Silver Hill, Md., where numerous aircraft are in the process of repair and restoration.

**LATROBE.** Members were enthusiastically involved throughout the year in the establishment of the Baltimore Museum of Industry, including the rebuilding of their steam tug boat. Denis Zembala has agreed to a missionary project in coming to the Roebling Symposium to show what can be done in the establishment of the type of museum most notably missing in the N.Y.-N.J. harbor area.

**OTHER CHAPTERS.** The Chicago chapter is "dormant," reports president David Bolanos. Meanwhile, plans move ahead for the initial meetings and tours of the proposed Philadelphia chapter. The Twin Cities IA group, gasping and wheezing after their herculean annual conference effort, are mulling over the possibility of forming a local chapter.



## NEWS IN BRIEF

**ALABAMA—SLOSS COMES BACK.** With an appropriate Labor Day celebration, Birmingham's Sloss Furnaces [1927-29; NHL, HAER] opened to the public on a permanent weekend basis. The 17.4-acre site claims two of the best extant early 20th-C. blast furnaces. An amphitheater, outdoor stage, exhibition gallery, and other facilities are part of the new complex, which has been in the works since 1971 when the last operator donated the site for museum and community center development [*SIAN* Mar. 78:1, July 79:1, Summer 82: 6-8].

**IA GETS HOT.** The Three Mile Island (TMI) nuclear site is becoming a regular tourist trap, complete with conoid coffee mugs mimicking the giant cooling towers, according to the Associated Press's Saul Pett in Middletown, Pa. Before the 1979 accident, General Public Utilities, TMI's parent, had a public

relations staff of one. Today some 35 PR employees, plus another 30 on call as community speakers, seek to lighten the ominous impact of the TMI disaster and spread cheer about nuclear energy. They are aided by The Friends and Family of TMI, an organization that feels nuclear power has been getting a bum rap.

SIA joggers in Central Pennsylvania will appreciate the recent "TMI Reactor Run-by" which took some 700 runners over a five-mile course past the still-hot remains. For more sedentary types guided bus tours accomplish the necessary field work (how did we miss this during the 1982 Annual Conf. in Harrisburg?). Preservationists have been heard muttering about the irony of a site which nobody can bulldoze. The company, meanwhile, thinks that people will feel better about nuclear energy if they visit a plant and "catch some of the ambiance of the place," according to one official.

## CALENDAR

*Have a meeting, conference, or event of interest to SIA members? Submit announcements to the Editor, SIAN.*

**To Jan. 8, 1984:** Exhibit — "Community Industries of the Shakers: A New Look," N.Y. State Museum, Albany.

**To May 13, 1984:** Exhibit — "The Great CPR Exposition: The Impact of the Railway on Western Canada, 1863-1930," Glenbow Museum, Calgary.

**Sept. 22-25:** 10th Anniversary Conference, Heritage Canada Foundation, Toronto. Craig Whitaker discusses Montreal and Toronto waterfronts and historic CN and CP roundhouses; James Marston Fitch reviews urban Toronto. A special workshop Sept. 19-21 on "Industrial Archeology and Preservation" (\$175), chaired by Norman Ball, precedes the conference. Info.: Conf. Coordinator, 21 Sackville St., Toronto, Ontario M5A 3E1 (416-868-1974 or 868-1972); workshop info.: Workshop Coordinator, Heritage Canada Found., P.O. Box 1358, Station B, Ottawa, Ontario K1P 5R4 (613-237-1066).

**Sept. 23-24:** A regional meeting of the Lexington Group in Transportation History, Sacramento, hosted by the Southern Pacific Trans. Co. and the Calif. State RR Museum. Incls. tours of the museum and SP's locomotive works. Info.: Don L. Hof-sommer, 1010 Zephyr, Plainview, Tex. 79072.

**Sept. 23-25:** 2nd Annual Conference, Society for the Preservation of Old Mills, Pigeon Forge, Tenn., in the foothills of Gt. Smoky Mts. Nat. Park. Incls. tours of Coada, Mingus, Regan, Hodges, and Riverdale mills. Info.: Michael LaForest, *Old Mill News* Editor, 604 Ensley Dr., Route 29, Knoxville, Tenn. 37920.

**Sept. 28-Oct. 2:** Annual Meeting, Assn. for Preservation Technology, Nashville, Tenn.

**Oct. 4-8:** 1983 Annual Meeting, American Assn. for State & Local History, Victoria, B.C. Info.: AASLH, 708 Berry Rd., Nashville, Tenn. 37204 (615-383-5991).

**Oct. 7-8:** 1983 Annual Meeting, Pioneer America Society, Western Illinois Univ., Macomb. Info.: Russell G. Swenson, Dept. of Geog., WIV, Macomb 61455 (309-298-1648).

**Oct. 13-15:** SIA Fall Tour, Colorado. Info.: Peter M. Molloy, West. Mus. of Mining & Industry, 4520 Northpark Dr., Colo. Springs 80919 (303-598-8850). [See article in this issue.]

**Oct. 15:** New England Regional Conf., Society for the Preservation of Old Mills, Slater Mill Historic Site, Pawtucket, R.I. Incls.

tour of Hendrick's [saw] Mill, Exeter, R.I. Info.: Don Martin, Gardiner Rd., Wiscasset, Maine 04578.

**Oct. 26-30:** 37th Nat. Pres. Conf., National Trust for Historic Preservation, San Antonio, Tex. Winedale Historical Center tour on Oct. 30 incls. archeological excavation at Kreische Brewery. Info./ Nat. Preservation Conf., Nat. Trust for Hist. Pres., 1785 Mass. Ave. N.W., Wash. D.C. 20036.

**Nov. 13+:** "HABS Week" celebrating HABS 50th anniv. Incls. Nov. 16 conf. on recording technologies. Info.: HABS/HAER Div., Nat. Park Service, Wash. D.C. 20240.

**Dec. 27-30:** Annual Meeting, American Historical Assn., San Francisco.

**Jan. 5-8, 1984:** Annual Meeting, Soc. for Historical Archaeology and the Conf. on Underwater Archaeology, Williamsburg, Va.

**Jan. 1984:** Deadline, submission of paper proposals, SIA 13th Annual Conf., Boston. Info.: Michael B. Folsom, Charles River Mus. of Industry, 154 Moody St., Waltham, Mass. 02154 (617-893-5140).

**April 4-7, 1984:** Organization of American Historians, Los Angeles.

**April 25-29, 1984:** 37th Annual Meeting, Soc. of Architectural Historians, Minneapolis. Incls. Sat. session on "Industrial Architecture" chaired by Robert Brueggemann, Univ. of Ill.—Chicago Circle.

**June 7-8, 1984:** Lowell Conf. on Industrial History, Lowell, Mass. Info.: Robert Weible, Lowell Nat. Historical Park, 171 Merrimack St., Lowell 01853. [See article in this issue.]

**June 8-14, 1984:** Industrial Heritage '84, co-hosted by SIA and SIA-SNEC, under auspices of Intl. Committee for the Conservation of the Industrial Heritage (TICCIH), Lowell and elsewhere. Info.: Stephen Victor, Conf. Coordinator, 166 E. Rock Rd., New Haven, Conn. 06511. [See article in this issue.]

**June 10-14, 1984:** Annual Meeting, American Assn. of Museums, Washington.

**June 14-17, 1984:** SIA 13th Annual Conference, Boston. Info.: Michael B. Folsom, Charles River Mus. of Industry, 154 Moody St., Waltham, Mass. 02154. [See article in this issue.]





# SOCIETY FOR INDUSTRIAL ARCHEOLOGY NEWSLETTER

## PUBLICATIONS OF INTEREST

A SUPPLEMENT TO VOL. 12 NOS. 2 & 3      SPRING & SUMMER 1983

Compiled by John M. Wickre, Minnesota Historical Society, & Robert M. Vogel, National Museum of American History

### BOOKS & ARTICLES

William F. Althoff, NAS LAKEHURST 1921-1941, A PHOTOGRAPHIC HISTORY. In *AAHS Jnl.*, Spring 1982, pp. 2-14. American Aviation Historical Soc., 2333 Otis St., Santa Ana, CA 92704. Naval Air Station, Lakehurst NJ; station map + 43 photos of rigid and non-rigid airships, hangars, helium purification plant.

Dennis A. Anderson, CLARK KINSEY: LOGGING PHOTOGRAPHY, 1914-1945. In *Pacific Northwest Qtly.*, Jan. 1983, pp. 18-27. Short narrative with selected photos from the 5200 negatives printed by the Clark Kinsey Photography Preservation Project, Univ. of Washington Libraries.

Madeline Angell, LEADER IN LEATHER: THE S.B. FOOT TANNING CO. OF RED WING. In *Minnesota Hist.*, Fall 1981, pp. 262-74.

L.H. Barber, TECHNOLOGICAL TRANSFERENCE? THE AUSTRALIA-NEW ZEALAND FARMING NEXUS IN THE 19thC. In *Agricultural Hist.*, Apr. 1983, pp. 212-222. Inc. shearing machines, refrigeration, farm machinery mfg.

Paula Colby Barrett, IOWA'S AUTOMOTIVE PIONEERS: THE COLBY MOTOR CO. In *Palimpsest*, July-Aug. 1981, pp. 118-28.

William D. Barry, with Francis W. Peabody, TATE HOUSE: CROWN OF THE MAINE MAST TRADE. National Soc. of Colonial Dames of America in the State of Maine (Portland), 1982. 116 pp., illus., maps, index, \$13.75/\$26.75. Avail.: Tate House Book, 9 West Main St., Yarmouth ME 04096. The 1755 Tate House, Stroudwater, built by Crown mast agent George Tate; with background on colonial masting trade, c.1690-1775. Rev.: *Jnl. of Forest Hist.*, Jan. 1983.

Ian R. Bartky, THE INVENTION OF RAILROAD TIME. In *RR History* 148, Spring 1983, pp. 13-22. Charles F. Dowd, William F. Allen, and the development of standard time zones, adopted by U.S. RRs, Nov. 18, 1883.

Thomas S. Baskett, Jr., MINERS STAY AWAY!: W.B.W. HEARTSILL AND THE LAST YEARS OF THE ARKANSAS KNIGHTS OF LABOR, 1892-1896. In *Arkansas Historical Quarterly*, Summer 1983, pp. 107-133. Unusual glimpse of this secretive order from Heartsill's personal papers.

Andrew Birtle, GOVERNOR GEORGE HOADLY'S USE OF THE OHIO NATIONAL GUARD IN THE HOCKING VALLEY COAL STRIKE OF 1884. In *Ohio History*, Annual 1982, pp. 37-57.

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