

**IA** AT THE **HEAD** OF THE **LAKE 2000** Annual Conference Review

bout 200 members attended the 29th Annual Conference in Duluth, Minnesota, June 1-4, where iron ore, from mine to boat, was the principal theme. Participants stayed at the downtown Radisson Hotel Duluth-Harborview, which lived up to its name, offering vistas from its upper floors (including revolving restaurant) of the Duluth-Superior harbor with its vertical-lift bridge, ore docks, grain elevators, lighthouses, and Great Lakes freighters and ore boats. Wind, rain, fog, and then sunshine alternatively painted the harbor and Lake Superior beyond with kaleidoscopic patterns and colors.

The Radisson was an ideal spot to take in Duluth's geography, an important influence on the city's industrial history. Nestled at the head of Lake Superior, Duluth is blessed with a natural harbor, St. Louis Bay, isolated and protected from the lake by a long strip of land, Minnesota Point. The navigable St. Louis River, which is the Minnesota-Wisconsin boundary, flows into the bay from the southwest, separating Duluth from Superior, its Wisconsin counterpart. Industrialists recognized the potential of the harbor in the 1850s, the same decade that the first iron ore was taken from northern Minnesota's Iron Range (really three ranges-the Vermilion, Mesabi, and Cuyuna).

Duluth-Superior harbor was the transhipment point for lumber, grain, and ore, brought to the lake by rail. The port boomed in the 1870s and 1880s as it became ringed with the elevators, ore docks, and piers necessary for transferring bulk goods to the Great Lakes fleet. At Thursday evening's welcoming reception, Pat Labadie, recently retired Director of the Canal Park Marine Museum, shared his extensive knowledge of the port's history in a slide presentation that began with the days of wooden steamers and schooners and ended with modern steel superlakers. Harbor improvements, such as dredging the bay and constructing a ship canal through Minnesota Point in 1871, accompanied the launching of boats of ever greater capacity. The dimensions of the canal at Sault Ste. Marie at the eastern end of Lake Superior has historically been, and still is today, the limiting factor on the size of ships visiting Duluth. Iron-ore shipping has decreased significantly since the 1960s, but Duluth is still one of the largest grain shipping ports in the world.

The first of Thursday's tours began with a grain product, beer. Susan Appel, brewery architecture historian, led a visit to the 1886-1911 Fitger's Brewery Complex [NR], a Richardsonian

Romanesque-style building that was Duluth's largest and longestoperating brewery until it closed in 1972. The complex has been adaptively reused as a retail center and hotel. Although Duluthmade brew is no longer to be had at Fitger's, the city has not let the trend in modern microbreweries pass by. The Lake Superior Brewing Co., established in 1994, makes beers in small batches using traditional methods and Lake Superior water. SIAers received a tour of the operating brewery and, of course, sampled the various microbrews. (continued on page 2)

The second of Thursday's tours visited the waterfront in downtown Duluth. The area has been redeveloped as a convention and retail center with lakefront park. A pedestrian walkway features outdoor sculpture, the focus of a walking tour that began with a slide show at the hotel and ended with a stop at a ceramicist's stu-

SIAers array themselves on the steel headframe of the Pioneer Mine, Ely.

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#### **DULUTH** (continued from page 1)



Elliot Hunt photo

SIAers at the whaleback freighter S. S. Meteor.

dio where the artist described the process of creating raku pottery. The conference stepped into full swing Thursday evening with the welcoming reception, hosted by the **Lake Superior Railroad Museum** and the **St. Louis County Historical Society** in the Great Hall of the **Duluth Union Depot** [NR]. The blond-brick depot with turrets, built in 1890-92, is French Chateauesque style. It was a working station until 1969, and it has been a heritage and arts center since the 1970s. Food and drink were plentiful, and the museum's collection of locomotives and rolling stock, housed in the train shed, was open to view. Some of us climbed to the operator's seat of the Russel wedge snowplow, imagining what it must have been like to clear the rails during a Midwestern blizzard with a steam locomotive pushing the plow.

While Friday morning wasn't wintery cold, it was cool, windy, and damp enough to warrant a jacket and hat as conference participants boarded buses for tours of Duluth-Superior and the Iron Range. Three tours were offered to different areas of the Iron Range, and three to sites in and around Duluth-Superior. These days it is a rare site that will allow a group as large as the SIA to visit *en masse*, and thus we must divide into smaller groups. Perhaps the most difficult decision of the conference is made before leaving home: deciding which of the tours to check off on the registration form. I almost always have regrets about missing some of the stops on the other tours, greater ones this time because the reports back from each of the six tours were just that good.

My tour of choice was Iron Range Tour 3. Our guide, "Iron Mike," a native of Ely in the Vermilion Range, fascinated the group with stories of hard times in the mining towns as we made the bus ride north from Duluth to the **Soudan Mine**, which opened in 1884. The underground Soudan had reached a depth of 2,400 ft. when it closed in 1962. The ore is an uncommon non-magnetic, oxygen-rich hematite, high in iron and low in phosphorous, that was used primarily as a catalyst prior to the use of oxygen lances in steelmaking. It required no refining and was sent directly to the furnaces. The ore body is hundreds of millions of years older than others in the region, accounting for its unique composition. The ore is so hard that almost no timbering was required in the mine, which is also exceptionally free of water, one of the reasons that it can be open to the public today as a state park. The Soudan was called "the Cadillac of mines" because it was so safe

and working conditions were so good. Park guides accompany visitors down the shaft to the lowest level and then load them into mine cars for the nearly one-mile-long ride in the drift to the working face. In a unique re-use, part of the mine today houses a neutrino research facility. The Fermi Lab in Chicago will aim neutrinos at a collecting dish housed deep in the mine to determine whether the subatomic particles have mass.

Leaving the Soudan, we continued to Ely, a former mining town that is now better known as a provisioning point for canoeing in the Boundary Waters Canoe Area Wilderness between the U. S. and Canada. A lunch of mouth-watering homemade hot pasty-traditional miners' food of meat and vegetables wrapped in pastry —was had at the Dorothy Molter Museum, where we also sampled Dorothy's traditional recipe for root beer. Molter (1907-87) lived on an island in the isolated boundary waters for more than 50 years. In summer, she opened her cabin doors to canoeists, serving 11,000 bottles of root beer annually. When she passed away, her cabin and belongings were moved to Ely to establish a museum in her honor. Another sign of the transition from iron to tourism is Ely's Wintergreen Northwoods Apparel. The company produces Eskimo-style clothing and outerwear from synthetic fabric like Polar Fleece, for a high-end market of tourists and recreationalists who enjoy winter sports. The company employs a workforce of 40 seamstresses, designers, and cutters. Our tour took us through the sewing room, a very traditional operation. The company is owned by Susan Schurke, who first used her talents as a designer to create clothing for her husband Paul's 1986 expedition to the North Pole with Will Steger and Ann Bancroft. Our afternoon in Ely ended with a stop at the underground Pioneer Mine that operated from 1889 to 1967. The shaft is closed off and the workings flooded, but the steel headframe, engine house, and miners' "dries" remain. They are subjects of an ongoing community preservation project.

Iron Range Tour 1 began its day at Two Harbors on the north shore of Lake Superior where the group viewed the tugboat **Edna G**. Built in 1896 by the Cleveland Ship Building Co., the Edna G. was the last working, hand-fired, steam-powered tug on the Great Lakes when she retired in 1981. For most of her life, the tug assisted ore boats at the three ore

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The SIA Newsletter is published quarterly 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 \$35; couple \$40; full-time student \$20; institutional \$40; contributing \$60; sustaining \$125; corporate \$250. Send check or money order payable in U.S. funds to the Society for Industrial Archeology to SIA-HQ, Dept. of Social Sciences, Michigan Technological University, 1400 Townsend Drive, Houghton, MI 49931-1295; (906) 487-1889; e-mail: SIA@mtu.edu; Web site: www.ss.mtu.edu/IA/SIA.html.

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The SIA Newsletter welcomes material and correspondence from members, especially in the form of copy already digested and written! The usefulness and timeliness of the newsletter depends on you, the reader, as an important source of information and opinion.

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#### **DULUTH** (continued from page 2)

docks at Two Harbors. Now she is a historic site operated by the Lake County Historical Society. Just up the road from Two Harbors is the 1910 **Split Rock Lighthouse**. It is perched atop a 120-ft.-high sheer cliff and is exceptionally photogenic with its adjacent keepers' house and fog signal building. Decommissioned in 1969, the lighthouse was taken over by the Minnesota Historical Society in 1976, and now operates as a living museum.

From Split Rock, Tour 1 followed the route of the Duluth & Iron Range RR inland to Hoyt Lakes at the eastern end of the Mesabi Range and the **LTV Steel Mining Co.**, established in 1957 by the Erie Mining Co. From the open pit mine, the taconite ore is taken to the mill where it is crushed, ground, and concentrated to an

iron content of 67 percent. In the pellet plant, the moist concentrate is mixed with a binder into "green balls" that are then conveyed to furnaces where they are hardened. The pellets are shipped by rail 74 miles to Taconite Harbor on Lake Superior for loading onto lake carriers bound for LTV blast furnaces in Cleveland and Indiana Harbor. Just days before the conference, LTV announced plans to close this plant, the oldest continuously operating taconite plant on the range.

Although often overshadowed by iron, lumber and wood products historically have played an important role in the region's economy, and still do. The last stop was **Partridge River**, **Inc.**, a supplier of hardwood and softwood dimensioned parts used mostly in kitchen cabinets and furniture. This company, established in 1987, uses modern, highly automated milling equipment, although inspection of the semi-finished wood strips to weed out imperfections depends fully upon the eyes and judgement of humans.

Iron Range Tour 2 began its day at the opposite, western end of the Mesabi Range in Grand Rapids. First stop was ATV, Inc., a company that manufactures all-season, track-driven, vehicles and related accessories. The primary product is the Posi-Track, the rubber-track suspension system of which provides traction, stability, and mobility, but does not damage surfaces as do traditional caterpillar tracked vehicles. The tracks are made of molded rubber reinforced with layers of nylon, Kevlar, and fiberglass rods. The company started in 1983 and has found all sorts of specialized uses for its vehicles in construction, landscaping, and agriculture. A grain export company is using Posi-Tracks in the holds of grain vessels to level the grain for proper weight distribution, eliminating many hours of hand labor. Also in Grand Rapids, SIAers toured the Blandin Paper Co. and its pressurized groundwood mill used to process pulp. Several of its Fourdrinier paper machines have been in use since the 1930s. The company produces a highgrade magazine paper.

From Grand Rapids, Tour 2 headed east into the Mesabi Range to the open-pit **Hill Annex Mine**, which operated from 1913 to 1978 when the high-grade ore played out. It was sold to the Iron Range Resources and Rehabilitation Board for \$1. The Board established a visitor center and gave tours of the mine for ten years before turning it over to the state for a park in 1988. Last stop of the day for this tour was the open-pit mine of the **National Steel Pellet Co.**, with its massive shovels and trucks. Also scheduled was a visit to the taconite plant, but unfortunately the group was running late and that part of the tour was canceled. Several SIAers reportedly wandered off to take pictures and explore, causing part of the delay. Shame! The taconite plant, built in 1967,



The John G. Munston unloads limestone (to be mixed with taconite for flux at pelletizing plants) before taking on iron at Duluth-Superior Harbor.

Like generations of miners, conferees squeeze into the Soudan Mine's steel cage for the 2,400-ft. deep ride down the shaft.

ships ore pellets to National Steel furnaces in Detroit and Granite City, Illinois. Staff graciously offered to provide tours to disappointed individuals at later times.

Duluth Tour 1 was titled "Big Steel, from



Boats to Bridges." This group started its morning at the *William A. Irvin*, the 1938 flagship of the U.S. Steel Great Lakes Fleet. The *Irvin* now resides as a floating museum in a slip in downtown Duluth. When she was a working ore boat, her holds were capable of carrying 14,088 tons of ore. As U.S. Steel's flagship, she was rather elegantly appointed with VIP staterooms, one of the reasons she was saved from the scrapyard in 1978. Across the street from the *Irvin*, the Lake Superior Maritime Museum, operated by the U.S. Army Corps of Engineers, houses excellent exhibits on the history of Lake Superior and some of the finest ship models anywhere.

Tour 1 was the tour of choice for SIA pontists (i.e., bridge enthusiasts). The "Aerial Lift Bridge" over the Duluth Ship Canal is the city's signature landmark. When built in 1905, it was a "transporter" (the only one ever built in the Western Hemisphere), an odd cross between a bridge and a ferry. A gondola, suspended by cables from the high-level truss, moved between the two banks, carrying vehicles and pedestrians. In 1929-30, it was converted to a vertical-lift highway bridge with new heavier towers surrounding the old and integrated with the counterweights and lift span. The Blatnik Bridge, built in 1961, is a high-level cantilever-truss span over the St. Louis River, with an overall length of 7,980 ft. In its shadow are several abandoned through-truss approach spans of the low-level bridge it replaced,

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the 1896 **Interstate Bridge**, whose swing span is no longer extant. Miles upstream of the Blatnik Bridge is the **Oliver Bridge**, a double-deck railroad (top) and highway (bottom) bridge built by the Duluth, Missabe & Iron Range Rwy. in 1910. It has a 300-ft.-long Warren-truss swing span over the navigable channel.

Following a tour of **Morgan Park**, a model company town built by U.S. Steel in 1913-14, the group visited **ME International**, claimed to be the largest steel foundry built in North America in the last 50 years. The plant produces parts for the minerals processing industry, specifically white iron and alloy castings that are used in grinding mills. The facility uses a dry sand vacuum molding process, which eliminates the need for binders and produces castings with a well-defined surface finish. Tour participants were able to get up close to hot metal pours in this state-of-the-art facility.

The Duluth area has a large number of active wood-products industries and it was thus possible to arrange for Duluth Tour 2 to focus on this theme, combined with power generating sites. **Georgia-Pacific**, formerly Superior Wood Products Co. established in 1945, operates a hardboard plant on a former shipbuilding site on the harbor. SIAers saw wood chips cooked under heat and pressure to soften them and dissolve some of the natural resins. The chips were then shredded into fibers and formed into a pulpy mass, screened, much like paper, and pressed to weld the fibers back together into hardboard ranging from 1/10- to 5/16-in. thick. Seeing the black multi-layered steam presses in action with water gushing out the sides and clouds of steam rising was awe-inspiring.

The stop at the Duluth Steam Cooperative, a 1932 utility that



SIA members in the 33 cubic-yard bucket of a shovel, LTV taconite mine, Hoyt Lakes.

provides steam to downtown Duluth, offered the opportunity for tourers to crawl through the firebox of one of the Edge Moor boilers which was down for maintenance. For power plant fans, it doesn't get much better. Of course, Minnesota Power's **Thomson Station** provided some competition. Construction of this hydropower plant on the St. Louis River near Fond du Lac began in 1905 and its equipment, such as the three Escher-Wyss designed turbines manufactured by Allis-Chalmers, was modeled on that used at Niagara. Much of the original equipment is still in the plant, although modified or unused. The plant originally generated 25-cycle current and, although the first 60-cycle generator was installed in 1914, the last of the originals was only converted in 1989. Following highway 210, the group passed over the 7-ft.diam. penstocks and then paused for photos at the dam itself.

Returning to the theme of wood products, the group went on to Potlatch Corp. in Cloquet. Potlatch produces premium coated printing papers. The mill is nearing completion of a \$525-million modernization and expansion. SIAers got to see the new "wood room" with massive debarking machinery that tumbled entire trees and shook the earth beneath their feet. Before continuing on to Diamond Brands, the group drove by the only Frank Lloyd Wright designed gas station ever built. It stands at the intersection of highways 33 and 45 in Cloquet. The tour of Diamond's plant gave tourers the chance to see the only manufacturer of stick matches in the U.S. and Canada. Toothpicks, craft sticks and corn dog sticks are also made here. Wooden match production began at this site in 1928, although Diamond has been in operation since 1881 at various locations across the country. Friction matches are turned out at the rate of more than 300 a second on machines 60 ft. long and two stories high. Match splints are bathed in ammonium phosphate, and then dipped into melted paraffin. A chemical composition forms the bulb, and next the machine tips the matches with a sesquisulfide of phosphorus, which, when struck, ignites with chlorate of potash to produce the flame.

Duluth Tour 3 went to Superior to look at the port's storage and transfer infrastructure. The **Peavey–Connor's Point Elevator** was built in 1965 for the Chicago & North Western Rwy. SIAers toured the facility that holds more than eight million bushels of grain and can load ships at a rate of 75,000 bushels per hour. The **Superior Midwest Energy Terminal** was built by Detroit Edison in 1976 to speed coal to its power plants in Michigan. The low-

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SIA Past President Sandy Norman (L) and President Carol Poh Miller "steering the good ship SIA" in front of a concession stand, near the whaleback S. S. Meteor. Oddly, they seem to be pulling the wheel in opposite directions.

Matt Kierstead photo.

# **Eric DeLony** 2000 General Tools Award Recipient

The Society for Industrial Archeology General Tools Award for Distinguished Service to Industrial Archeology recognizes individuals who have given sustained, distinguished service to the cause of industrial archeology. Nominations for the award may be made by any member in good standing. Criteria for selection are as follows: The recipient must have given noteworthy service, over an extended period of time, to the cause of industrial archeology. The type of service is unspecified, but must be for other than academic publication. It is desirable, though not required, that the recipient be a member of the SIA. And, finally, the award may be made only to living individuals. The Award was established in 1992 by Gerry Weinstein, Chairman of General Tools Manufacturing Company, and is funded through an endowment created by the Abraham and Lillian Rosenberg Foundation. Previous recipients of the General Tools Award are Emory Kemp, Robert Vogel, Margot Gayle, Ed Rutsch, Pat Malone, Helena Wright, and Vance Packard. The following citation was read by General Tools Award Committee Chairman Duncan Hay at the SIA's Annual Business Meeting, Duluth, MN. The award consists of this citation, a commissioned sculpture (the famous Plumb Bob), and an honorarium of \$1,000.

This year's recipient of the Society for Industrial Archeology's General Tools Award for Distinguished Service to Industrial Archeology is Eric DeLony, Chief of the Historic American Engineering Record.

Eric did not attend the SIA's original meeting in 1972, but he was already practicing in the field of IA at a time when this society's founders were still debating whether archeology should be spelled with one "a" or two. He had been hired as a student architect in 1968 to work on the second phase of the New England Textile Mills Survey—a joint project of the Smithsonian's National Museum of History and Technology (now the National Museum of American History) and the Historic American Buildings Survey (HABS).

In the summer of 1969, after graduating with a degree in architecture from Ohio State University, Eric worked as a delineator on the Mohawk-Hudson Area Survey, the first project of the newly created Historic American Engineering Record. As the first official HAER project, the Mohawk-Hudson Survey challenged its team



Eric DeLony, 2000 recipient of the SIA's General Tools Award for Distinguished Service to Industrial Archeology.

members to devise recording techniques for a variety of manufacturing and engineering structures that were significantly different than the techniques developed at HABS during the previous thirty-six years.

Eric became HAER's first

permanent employee in 1971. HAER's first decade was a period of remarkable creativity and production—a time when architects, photographers, historians, and engineers worked together to create new means of recording, interpreting, and presenting historic industrial sites and processes. During that time, Eric and his colleagues initiated a number of important programs within HAER: the Emergency Recording Team, the SWAT teams of the federal IA world, ready to step in front of bulldozers and document endangered structures; and, theme studies of particular types of structures such as suspension bridges, cast and wrought-iron truss bridges, and long-span trainsheds.

Eric worked to broaden his architectural training by taking courses at Columbia University's Historic Preservation Program and at the University of Bath and Ironbridge Institute under the aegis of a Fulbright fellowship. His studies in England inspired Eric's interest in international preservation of engineering landmarks that continues to this day.

Based on his coursework and experience at HAER, Eric organized what may have been America's first field school in industrial archeology through the University of Vermont's Historic Preservation Program and ran it for seven years.

Eric is probably best known for his interest in and passion for historic bridges. Emory Kemp credits him with launching what would become HAER's Historic Bridge Program in 1973. He initiated a series of statewide inventories of historic bridges and used them to identify significant structures that deserved further

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### **David Simmons 2000 Norton Prize Winner**

Each year the SIA recognizes outstanding scholarship within the field of industrial archeology with its Norton Prize, inaugurated by the Norton Company, a century-old materials engineering firm in Worcester, Massachusetts. The award honors the author of the best article to appear in the Society's journal, IA, within the past three years. Articles under consideration have a clearly stated thesis, a well constructed narrative, and an understandable conclusion. The analysis of material culture plays an important role in articles considered for the prize, as does the use of high-quality illustrations. The prize consists of a cash award and a wooden foundry pattern and plaque engraved with the recipient's name.

At the Annual Business Meeting, this year's award was presented by Norton Prize Committee Chair Fred Quivik to David Simmons for his article The *Continuous Clatter: Practical Field*  *Riveting*, published in vol. 23, no. 2. Simmons has produced a work that instantly has become a reference for analyzing riveted structures in the field. Founded on thorough scholarship, Simmons provides a background history of field riveting methods and surveys efforts to find a practical means to mechanize the process, culminating in the development of the Boyer pneumatic riveting hammer. He shows us a range of ways that we can draw upon material evidence to support our analyses. He examines examples of the Boyer hammer in museums, and he is especially innovative in deriving data from photographs of workers using the Boyer hammer. This latter technique is crucial to the success of the article because questions of workers' practice were so important in developing a tool that could perform under diverse conditions.

### **DULUTH** (continued from page 4)

sulfur coals originate in Wyoming, and the 200-acre site can store up to seven million tons of graded coal. Water cannons keep dust to a minimum, while rotary plowfeeders under the storage piles reclaim and blend the coal, which is loaded into vessels at rates of up to 11,500 tons per hour. Another stop on this tour was the **Burlington Northern Santa Fe Dock #5.** It is the port's largest taconite pellet transshipment facility, opened in 1977 to accommodate the superlakers. Ore cars are unloaded 3.5 miles away and the pellets stored or sent directly to the dock on conveyors. Dockside, the pellets are held in 36 silos, each storing 2,000 long tons. The silos are emptied by shuttle conveyors, which stick out 45 ft. over the water and can fill a superlaker in about eight hours. That's fast!

High and dry, but safely preserved in Duluth-Superior Harbor is the S. S. Meteor, launched in 1896 and the world's only remaining whaleback freighter, so named because of its unusual whalelike shape. The whaleback is the patented design of Alexander McDougall, who built most of them at his American Steel Barge Co. shipyard in West Superior during the 1890s. The whaleback design was at first ridiculed by sailors but it proved extremely efficient and stable for heavy loads of ore. Near the Meteor is the steam dipper-dredge, Col. D. D. Gaillard, built in 1916 and the last of the U.S. Army Corps of Engineers steam dredges. It was retired in 1982. The final stop of the tour was the Cirrus Design Corp., founded in 1984 by the Klapmeier brothers to make airplane kits for hobbyists. In 1987, they came up with the design for a cigar-shaped fiberglass aircraft that they deemed too difficult for amateur builders. So they opened this facility on an abandoned airfield in Duluth to manufacture it, along with several other models that have since been added to the line. Tourgoers saw the plant where the fuselage, wings, and tail are assembled.

Friday evening featured the traditional show-and-tell at the hotel, and an optional tour of **Glensheen**, a lavish 39-room Jacobean Revival mansion built between 1905 and 1908 on the shore of Lake Superior. Now a historic house museum of the University of Minnesota, it was the site of the infamous 1977 murder of Elisabeth Congdon, but, sorry, there are no bloodstains on the walls, and the museum staff makes no mention of this aspect of its history.

As traditional, paper sessions and the annual business meeting filled Saturday's schedule. I took in sessions on waterpower and bridges, but there were also sessions on transportation of industrial commodities, dams, government and technological development, mining communities, industrial infrastructure, and archeology of early industries, to name a few. The morning's IA in art sessions were well received and the room overflowing.

Saturday night's banquet, held in the hall of the St. George Serbian Orthodox Church, featured a delicious buffet of traditional Serbian foods including sarma (cabbage rolls). Entertainment was provided by the Duluth Klezmer Band. There was time to converse with old friends and new, and to walk upstairs for a tour of the sanctuary, where a knowledgeable member explained the many stunning icons.

Sunday's schedule offered optional tours for those who could spend an additional day in Duluth. A downtown architectural walking tour was led by Cheryl Reitan. Duluth's late-19th-century economic boom was evident in the many examples of Richardsonian Romanesque-style architecture, including a city high school with clock tower, which yours truly mistook for a train

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# Minutes of the 2000 Annual Business Meeting June 3, 2000

President Sandy Norman called the meeting to order in the main dining salon of the Radisson Hotel Duluth—Harborview, Duluth, Minnesota.

**Secretary's Report:** The minutes of the last business meeting were published in the Fall 1999 issue of the *SIAN*. Secretary Richard Anderson called for additions and corrections to the minutes. There being none, the Secretary's report was accepted by motion and unanimous vote.

**Treasurer's Report:** Treasurer Nanci Batchelor reported that the SIA began the calendar year 1999 with a total fund balance \$123,473. Cash receipts for the year totaled \$108,494. Various membership categories accounted for \$77,405 of the total. The balance was made up of interest income of \$31,089, publication sales of \$7,250, and contributions and a few miscellaneous items amounting to \$2,196. The total expenditures for the year were \$69,304. The production costs of our publications were \$40,759. Other major items were \$10,477 for labor, \$3,686 for postage, and \$4,004 for insurance, prizes, awards, and a few miscellaneous expenses. The year 1999 ended with a \$162,664 fund balance, \$12,103 of which are in restricted funds. The Treasurer's report was accepted by motion and unanimous vote.

**Conferences and Tours:** President Norman thanked all of the volunteers, organizations, and companies that made this year's conference in Duluth a success. She especially thanked Mary Habstritt for her extraordinary effort as conference coordinator. The Fall Tour 2000 will be in Sarnia, Ontario, Oct. 19-22. The 2001 Annual Conference will be in Washington, D.C., May 10-13, with special events planned to mark the 30th anniversary of the SIA. A Cornwall study tour is being planned for September 2001 by Bierce Riley. Pat Martin is planning a study tour to Germany's Ruhr Valley in March 2001.

**Local Chapters:** President Norman followed the tradition of past business meetings and asked representatives of all of the society's local chapters to stand. A new chapter has been formed, the Northern Ohio Chapter of the SIA. She encouraged members to contact the Board of Directors if they would like to form a local chapter in their area.

**Publications and SIA HQ**: President Norman recognized and thanked Pat Martin, editor of the journal and SIA Executive Secretary; Don Durfee, administrative assistant at SIA HQ; Terry Reynolds, book review editor for the journal; and Patrick Harshbarger, editor of the *SIAN*.

**Student Scholarships:** Mary McCahon and Patrick Harshbarger administer the student scholarship program. This year three students were supported with funds to offset some of the cost of attending the annual conference. They were Marshall Henderson, Paul

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### **DULUTH** (continued from page 6)



SIA members pose next to the biggest Cat bulldozer made, the D11, at the Superior Midwest Energy Terminal.

station because of its opulence.

The lunchtime harbor cruise aboard one of the Vista Fleet's excursion boats gave about 50 conferees an excellent opportunity to see the working side of the port. Nearly two hours were spent on the water and getting up close to active ore docks, grain elevators, and dry docks. Several experienced SIAers commented that this was one of the best SIA cruises ever. The port's facilities are impressive and the accompanying interpretation offered by the ship's captain and our SIA guide, Eric Bonow, was excellent. For those who preferred rails to water, the **North Shore Excursion RR** traveled the Lakefront Line of the Duluth, Missabe & Iron Range Rwy. (DMIR) to Two Harbors. The train features Burlington & Northern passenger coaches and a 1918 DMIR coach. At Two Harbors, the group disembarked and walked through the abandoned DMIR roundhouse and shops, unfortunately slated for demolition.

An all-day Sunday tour returned to the Soudan Mine and Ely (Iron Range Tour 1), and stopped at the International Wolf Center, where staff demonstrated the radio technology used to track wolves.

By Sunday evening, many of us wished that we could have stayed an extra several days in Duluth, as it felt as though there were still many IA sites left to see. The overall enthusiasm for the outcome of the conference is a credit to coordinator Mary Habstritt, who provided beyond-the-call-of-duty leadership. She was assisted by co-host staff and volunteers of the St. Louis County Historical Society and the Iron Range Resources and Rehabilitation Board. Mary co-authored a first-rate guidebook, IA at the Head of the Lake, with Larry Mishkar and Ann Barnard Toftness. Larry, Mary's right hand man, supervised production of all the conference publications, from the brochures to the souvenir notepads to the hardhat stickers. Many Minnesota and Wisconsin SIA members volunteered their help by leading tours or providing advice, resources, or contacts. Those who deserve thanks include Eric Bonow, Tom Garver, Hans Muessig, Bob Newbery and Charlene Roise. Special thanks go to Fred Quivik, who organized the paper sessions, and Don Durfee, who kept all the registration records straight.

J. P. H. & M. H.

## **Eric DeLony** (continued from page 7)

recording through HAER drawings, photographs, and written histories. Soon, Eric went beyond simply documenting aged spans to become an active advocate for their preservation. To that end, he formed alliances with influential members of the engineering community, the National Trust for Historic Preservation, state historic preservation offices, and highway departments to demonstrate that there were alternatives to wholesale replacement of old bridges. Amazingly, he not only got the attention of the Federal Highway Administration, the foremost advocate of bridge replacement, he also got some of their money for inventory, documentation, and preservation work. In 1992, HAER's Historic Bridge Program received a Presidential Historic Preservation Award.

For the past seventeen years Eric has organized and run a Historic Bridge Symposium in conjunction with the SIA annual conference. He has served on the History and Heritage Committee of the American Society of Civil Engineers, and in 1993 collaborated with HAER photographers Jet Lowe and Jack Boucher in the preparation of *Landmark American Bridges*, a book jointly published by the ASCE and the Bulfinch Press.

Within our own organization, Eric served two terms on the SIA's Board of Directors (1970-73; 1980-83). He was one of the founders of the Montgomery C. Meigs Original Chapter and served as its president for two terms during the 1980s. Another contribution that I discovered while re-reading the *Report of the Mohawk-Hudson Survey*, is that Eric drew the partial cut-away elevation of Troy's gasholder house that has served as the SIA's logo

since this organization's inception. [Thank heavens that HAER drawings are in the public domain. Thirty years of royalty payments to Eric for the use of that image would bankrupt the SIA.]

In conclusion, I would like to quote from two of the nominations that the General Tools Award Committee received on Eric's behalf. Emory Kemp, the first recipient of the General Tools Award wrote:

With the zeal of a missionary, [Eric] has trained a legion of young professionals into the intricacies of site recording. . . . . In the role of Ambassador, he has promoted, on an international basis, the Historic American Engineering Record and, in a larger sense, the field of industrial archeology in North America to historians, architects, engineers, and others interested in historic engineering works.

#### To that we can add Robert Vogel's words:

Taken altogether, Eric's career has been one of exceptional distinction and accomplishment. He has devoted his entire professional life and, for that matter, much of his personal, to the cause of industrial archeology, with an intensity of purpose that has raised his contributions far above and beyond the extent that might normally be looked for in even an unusually dedicated person.

We on the committee concur. We give you Eric DeLony, this year's recipient of the General Tools Award for Distinguished Service to Industrial Archeology.

# **30th Annual SIA Conference** Washington, D. C., May 10-13, 2001

oin the Montgomery C. Meigs Original Chapter and the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER), National Park Service, for a weekend in Washington celebrating the 30th anniversary of the founding of the SIA. Proposed events include an exhibit on the SIA at the Smithsonian's National Museum of American History and a retrospective on the 30th anniversary of the Historic American Engineering Record (HAER) at the National Building Museum. Tours will feature several examples of Meigs's engineering legacy, including the Washington Aqueduct, the Pension Building, and the U.S. Capitol. We will also investigate several historic buildings in the monumental core of the city, beautiful bridges and parkways, and some curious relics of federal influence in the areas of scientific research, transportation, military engineering, espionage, agriculture, and printing. There will also be regional tours examining maritime heritage, railroads, and canals, and preserved remains of early industry in Frederick, Maryland, and Harpers Ferry and Martinsburg, West Virginia. The conference hotel will be the Renaissance Hotel at 999 9th St., NW. Conference registration materials will be sent to all SIA members after the beginning of the year. Mark your calendars and prepare to join us in Washington in 2001. Info: Dean Herrin (301) 624-2773; e-mail: dherrin@fcc.cc.md.us; or, Christopher Marston (202) 343-1018; e-mail: christopher\_marston@nps.gov.

**CALL FOR PAPERS.** The SIA invites proposals for papers to be presented at the Annual Conference on Saturday, May 12. Presentations on all topics related to industrial archeology are welcome. The program committee especially encourages papers related to some of the general themes of industry in the Washington area: canal and railroad transportation, urban water supply, construction technology, printing and engraving, and defense and aerospace industries, among others.

Presentation Formats: Proposals may be for individual papers (20 min.), organized panel discussions (90 min., typically three papers, formal commentator optional), reports on works in progress (10 min.), or symposia of related papers.

*Proposal Formats:* Each paper proposal must include: 1) title; 2) an abstract of not more than 250 words; 3) a one page resume for the presenter(s), including postal address, telephone/fax, and e-mail; 4) a list of audio-visual requirements. A panel or symposium

## Minutes (continued from page 6)

Pickard, and Paul White. President Norman thanked the many SIA members who support the scholarship program with donations.

**Membership**: President Norman observed that this year's conference has the largest number of new members than any in recent memory. She invited all new members and student members to meet with past president Fred Quivik at a special reception later in the afternoon. A new membership directory tentatively is scheduled to be printed in Spring 2001.

Awards: Fred Quivik presented the Norton Prize to David Simmons. Duncan Hay presented the SIA General Tools Award for Distinguished Service to Industrial Archeology to Eric DeLony. organizer should submit all of the paper proposals as a group, accompanied by a title and a brief description of the theme or purpose. All proposers must submit four (4) copies of their proposals.

**Deadline:** December 31, 2000. Send paper copies of proposals to: Richard O'Connor, SIA Program Committee, HABS/HAER, 1849 C St., NW, Room NC300, Washington, DC 20240. Inquiries are welcome at the above address, or by phone (202) 343-3901; e-mail: *richard\_o'connor@nps.gov*.

**STUDENT TRAVEL SCHOLARSHIPS:** The SIA has limited funds to help full-time students and professionals with less than three years of full-time experience attend the annual conference in Washington. Those interested should submit a concise letter outlining their demonstrated interest in and commitment to the field of industrial archeology or a related field, and one letter of reference. Deadline for submissions is March 15, 2001. Info.: Mary E. McCahon, SIA Scholarship Comm., c/o Lichtenstein Consulting Engineers, One Oxford Valley, Suite 818, Langhorne, PA 19047; (215) 752-2206; fax 752-1539. Notice of awards will be made by April 10. ■

Call for SIA memorabilia, relics, and souvenirs! Since the 2001 meeting will commemorate the 30th anniversary of the founding of SIA, we are planning special activities to mark the occasion. If you have materials from early SIA conferences and events-photographs, posters, tour books, handouts, site souvenirs, artifacts, etc.-and would be willing to either loan these items or have them scanned, please contact Dean Herrin, 301-624-2773; e-mail: dherrin@fcc.cc.md.us. We are particularly interested in conference posters and photographs of SIA members on tours. Does anyone have film or video footage of early SIA activities? For larger artifacts from tours and other items (including items you might not want to loan but would like to show), we are planning a show-and-tell at the annual banquet. The National Museum of American History, which houses the SIA archives, will also mount a small display during the conference.

*Elections*: This year, our President Sandy Norman retires, and board members John Light and John Stacier rotate off the Board of Directors. They were thanked by a round of applause for their service.

Nominations Committee Chair Robert Casey announced the 2000 election results. Carol Poh Miller becomes President after two years service as Vice President. Elected to Vice President was Vance Packard. Elected to another term as Treasurer was Nanci Batchelor. Elected to another term as Secretary was Richard Anderson. Elected to the Board of Directors were Mary Habstritt and Robert Stewart. Elected to the Nominations Committee was Robert Frame.

Respectfully submitted, Richard K. Anderson, Jr. Secretary



A Supplement to Vol. 29, No. 2

COMPILED BY

Summer 2000

#### Mary Habstritt, New York, NY; and Patrick Harshbarger, SIAN editor.

#### **GENERAL INTEREST**

- ➤ David Barnett. London, Hub of the Industrial Revolution: A Revisionary History, 1775-1825. St. Martin's Press, 1998. 276 pp., tables. \$59.50. Argues that London, compared to Birmingham or Manchester, was a key contributor to industrialization by its wide range of business activity. Rev: T&C (Apr. 2000), p. 357.
- ➤ John K. Brown. Design Plans, Working Drawings, National Styles: Engineering Practice in Great Britain and the U. S., 1775-1945. T&C v. 41,2 (April 2000), pp. 195-238. Using a wealth of drawings, presents a compelling case for the primacy of culture in engineering practice. Engineering styles were production and profit driven in the U.S., and design and elegance driven in the U.K.
- John Crompton. Industry in the National Museums of Scotland. IA News 113 (Summer 2000), pp. 2-3. Industrial collections displayed in the new National Museums of Scotland, opened officially in Nov. 1999. Includes 1861 locomotive *Ellesmere*, textile machinery, exhibit paying homage to Robert Stevenson, lighthouse engineer.
- Enterprise and Society: The International Journal of Business History. Quarterly. Oxford Univ. Pr. (Journals Marketing, 2001 Evans Rd., Cary, NC 27513; 1-800-852-7323). \$55/yr. New journal, which succeeds the Business History Conference's Business & Economic History, features scholarly articles on the historical relations between businesses and their larger political, cultural, institutional, social, and economic contexts. March 2000 issue is a theme issue on Flexibility in the "Age of Fordism." Articles include Jonathan Zeitlin, Reconciling Automation and Flexibility? Technology and Production in the Postwar British Motor Industry; David Hounshell, Automation, Transfer Machinery, and Mass Production in the U. S. Automobile Industry in the Post-World War II Era; Eisuke Daito, Automation and Production Organization of Japanese Automobile Manufacturers in the 1950s; Michael Schwartz, Markets, Networks, and the Rise of Chrysler in Old Detroit. June 2000 issue includes Todd Postol, Masculine Guidance: Boys, Men, and Newspapers, 1930-39; Howell Harris, The Rocky Road to Mass Production: Change and Continuity in the U. S. Foundry Industry.
- Ronald R. Kline. Consumers in the Country: Technology and Social Change in Rural America. Johns Hopkins Univ. Pr., 2000. 336 pp., illus. \$39.95. Telephone, automobile, radio, and electric light transform life on family farms, 1900-1960.

David Stradling. Smokestacks and Progressives: Environmentalists, Engineers, and Air Quality in America, 1881-1951. Johns Hopkins Univ. Pr., 1999. 282 pp., illus. \$42.50. Origins and impacts of the antismoke crusade of the early 20th century.

#### RAILROADS

- Steven G. Collins. Progress and Slavery on the South's Railroads. RH, v. 181 (Autumn 1999), pp. 6-25. Slave labor co-existed with the latest management tools as the antebellum South adopted railroad technology.
- Keith Falconer. The Rolt Memorial Lecture 1998. Swindon—Brunel's Ugly Duckling. IA Review v. 22,1 (2000), pp. 3-20. The Great Western Railway works (1842-55) at Swindon, England are underappreciated but perhaps the single most extensive surviving memorial to the genius of Brunel.
- Shawn M. Herne. The Railroad Timekeeper. The B&O RR Museum (901 W. Pratt St., Baltimore, MD 21223; (410) 539-2311), 1999. 32 pp., illus. \$7. Guide to railroad clocks in the museum collection. Includes overview history of railroad timekeeping, photos, and brief history of each clock.
- Randy Hess. This Old Flat Car: Nuts & Bolts Sacramento Northern MW 32. Samuel Knight Chapter SIA Newsletter 10 (June 2000), pp. 12-18. Restoration techniques, interpretation, and suggestions for future flat car projects.
- George W. Hilton. The Ma & Pa: A History of the Maryland & Pennsylvania RR. 2nd Ed. Revised. Johns Hopkins Univ. Pr., 2000. 248 pp., illus. \$17.95. Paperback edition includes new introduction and epilogue covering the line's final years of service.
- Aaron Isaacs. Washington State. Railway Museum Quarterly (Spring 2000), pp. 5-10. Informative review of railway museums in Washington including Yakima streetcars, Yakima Valley Rail & Steam Museum, Mount Ranier Scenic Railroad, and Northwest Railway Museum.
- Railroad Heritage is a new quarterly magazine of the Center for Railroad Photography and Art. It showcases historic and contemporary railroad photography and art including ephemera such as advertising, calendars, brochures, and engravings. The first issue (Spring 2000) includes Arthur H. Miller, Photo Archives in the Donnelley Railroad Collection; Memorable Rail Photographs of the 20th Century (images selected from the Center's traveling exhibit); Michael Zega, PRR's Colonel Frank N. Barksdale, Inventor of the Limited Book (limited trains advertised by illustrated booklets); Storm Limits Exposure: Korling's Great Depression-Era Photo (account

# Notes From the President

### Keeping the Industrial Past Alive

By Carol Poh Miller

n Saturday, June 3rd, at the SIA annual business meeting in Duluth, I took the reins from President Sandra Norman. It is gratifying if a

bit overwhelming to stand at the helm of the Society for Industrial Archeology at this particular moment in time—at the start of a new century and as we, the North American forum for industrial archeology, stand poised to mark our 30th anniversary next year.

As a preservationist and historical consultant, I have long been high on the SIA, finding tremendous personal and professional value in its activities and publications, and special pleasure in the camaraderie of its diverse membership. On the rolls are architects, archeologists, engineers, museum specialists, planners, teachers, students, retirees, and many non-professionals for whom industrial archeology is an exciting avocation. Yet, while our present membership stands at 1,700—highest in SIA history—that number seems surprisingly small when one considers the seemingly exponential growth of interest in both historic preservation and heritage tourism.

As vice president, one of my duties was to oversee production of a new SIA membership brochure, a task I undertook with great

of taking a famous photo); *Diesel Styles & Styling*; *Artist Gil Ried* (painter of railroad subjects). The center is a nonprofit organization dedicated to educational programs that preserve and foster the visual art and record of the railroad industry. Exhibits, Web site, workshops, and archive. A \$40 annual gift includes magazine subscription. Info: Box 259330, Madison, WI 53725-9330; www.railphoto-art.org.

- > Railroad History: Millennium Special (2000), published by the R&LHS, is an edition devoted to the diesel revolution. Most of the articles originated in an April 1999 symposium, "Railroad Revolution: How the Diesel Locomotive Changed America" at the Barringer Library at the Univ. of Missouri-St. Louis. Includes Maury Klein, The Continued Neglect of the Diesel Locomotive: Why So Little Scholarly Attention?; Mark Reutter, The Revolutionary: Rudolf Diesel and the Theory That Shook the World: Albert Churella, Business Strategies and Diesel Development: Dueling Philosophies in the Erecting Halls; Jeffrey Meikle, Industrial Design Speeds Forward: Streamlining and the Revolution in Design; John Gruber, Symbol of Progress: Images of a Futuristic Age of Trains; Wallace Abbey, Railroads and the War: Steam and Diesel Roll Up Their Sleeves; Robert Aldag, Culture Clash: Diesel vs. Tradition; Don L. Hofsommer, Getting to Know Her: Three Railroads Learn to Like Diesel; J. Parker Lamb, Covered Wagons and Geeps: A Parade of First-generation Growlers; Colin Divall, Learning from America? Technology Transfer is Not Automatic; William Middleton, Diesel Railcar: A Look Ahead; James L. Larson, Afterword: The Enduring Diesel: Will It Dominate the Next 50 Years? Reading list of recent publications on dieselization.
- ➤ John White, Jr. A Bunch of Dummies. RH, v. 181 (Autumn 1999), pp. 61-78. A dummy is a steam locomotive boxed up to look like a passenger car. Explores the Victorian preoccupation with having things "look right."

pleasure. Featuring a compelling image of Cleveland's historic Central Furnaces, together with selected process tours SIA has hosted over the years, the brochure represents a collaborative effort by the board of trustees. Through the wonder of e-mail we labored over the text and images until we were all comfortable that we'd gotten it right—succeeded in describing, in a nutshell, who we are and what we do.

So ... with the goals of breaking 2,000 and increasing the vitality and programs of the SIA, I invite each of you to help spread the word. Surely you have a friend, acquaintance, or family member who is interested in the physical survivals of our industrial and technological past—in understanding how things were (and are) made and how industry and technology have shaped our environment and our history.

Keep the industrial past alive—by recruiting a new member to join the SIA! For membership brochures, drop a postcard to SIAHQ at the address on page 1 of this newsletter. Or call 906-487-1889; or e-mail us at sia@mtu.edu.

I look forward to working with each you during the next two years to advance the cause of IA and, of course, to toasting SIA at 30 at next year's annual conference in Washington, D.C.

- John White, Jr. East Is West and West Is East: A Comparison of Two Mountain Railroads. I & T (Summer 2000), pp. 22-26. The sleek and modern Manitou & Pikes Peak Rwy. and the rough-and-ready Mt. Washington Cog Rwy.
- Courtney B. Wilson. Mt. Clare: The Birthplace of American Railroads. B&O RR Museum (901 W. Pratt St., Baltimore, MD 21223; (410) 539-2311), 1999. 32 pp., illus. \$9. A timeline and survey of the B&O RR's Mt. Clare shops is a new guide for visitors to the museum.
- William Withuhn. Risk and Real Cost of Electrification. Wallace Abbey. Why the Sante Fe Isn't Under Wires. RH, v. 181 (Autumn 1999), pp. 79-102. Sante Fe, Union Pacific, and Conrail had major plans for electrifying their lines in the mid 1970s. Why three major railroads pulled the plug.

#### WATER TRANSPORTATION

- Eric Ash. "A Perfect and an Absolute Work": Expertise, Authority, and the Rebuilding of Dover Harbor, 1579-1583. *T&C*, v. 41,2 (April 2000), pp. 239-268. How does government decide who to trust with an expensive and confusing project? Expert mediators were vital even four centuries ago as they sorted out proposals to improve the harbor.
- ➢ John N. Jackson. The Welland Canals and Their Communities: Engineering, Industrial, and Urban Transformation. Univ. of Toronto Pr., 1997. 535 pp., illus., maps. \$70. The canal that bypassed Niagra Falls in 1829 and that has been enlarged four times since. A force for industrialization and urbanization of the Great Lakes region. Rev: T&C (Apr. 2000), p. 371.
- David A. Mendell. War, Technology, and Experience aboard the USS Monitor. Johns Hopkins Univ. Pr., 2000. 224 pp.,

illus. \$35 hc, \$14.95 pb. Examines the experience of men aboard the famous ironclad from the perspective of the thrills and dangers that accompanied the new machine.

#### **AUTOMOBILES & HIGHWAYS**

- Peter Genovese. The Great American Road Trip: U.S. 1 Maine to Florida. Rutgers Univ. Pr., 2000. 272 pp., illus.
   \$32. Roadside attractions and industries.
- John A. Jackle and Keith A. Sculle. Fast Food: Roadside Restaurants in the Automobile Age. Johns Hopkins Univ. Pr., 2000. 416 pp., illus. \$34.95. Origins, architecture, and commercial growth of roadside eateries.
- Michael P. McCarthy. Baltimore's Highway Wars Revisited. Maryland Historical Magazine v. 93,2 (Summer 1998), pp. 136-157. Late 1950s to 1960s highway location battles.
- ➤ Stephen McIntyre. The Failure of Fordism: Reform of the Automobile Repair Industry, 1913-1940. T&C, v. 41,2 (April 2000), pp. 269-299. The Ford Motor Co. tried to replicate assembly-line order in franchised repair shops, but dealers and mechanics resisted costly remedies designed at the home office.
- Preserving the Historic Road in America Conference Proceedings. CD-ROM presents over 60 papers addressing the identification, preservation, and management of historic roads. April 2000 conference held in Morristown, NJ. \$29 ppd. Avail: Karen VanGilder, Rural Heritage Program, National Trust for Historic Preservation, 1785 Massachusetts Ave., NW, Washington, DC 20036.
- ► Karl Raitz. American Roads, Roadside America. Geographical Review v. 88,3 (July 1998), pp. 363-387. Roadside vernacular architecture.

#### WATER CONTROL & RECLAMATION

- Tony Crosby and Shane Gould. Surveying the Public Water Supply in Essex. IA News 113 (Summer 2000), pp. 4-5. Ongoing program to document water towers, pumping stations, and treatment works in England.
- Martin V. Melosi. The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present. Johns Hopkins Univ. Pr., 2000. 600 pp., illus. \$59.95. Comprehensive studies of water supply, wastewater, and solidwaste-disposal systems.

#### **BUILDINGS & STRUCTURES**

- ➤ John A. Martini. **Base End Stations**. Samuel Knight Chapter SIA Newsletter 10 (June 2000), pp. 8-11. Concrete bunkers that dot the California coastline served as the "eyes" for artillery batteries. They helped gunners calculate ranges to enemy ships. The earliest permanent stations date from 1908 and they continued to be built through 1945. Describes construction techniques and range-finding operations.
- Paula H. Simpson. Cheap, Quick, and Easy: Imitative Architectural Materials, 1870-1930. Univ. of Tenn. Pr., 1999. 215 pp., illus. \$39. The fabrication, distribution, and marketing of building materials that attempted to look like traditional natural materials. Concrete block, sheet metal, "tin" ceilings, linoleum, imitation plasters, embossed wall and ceiling coverings (Lincrusta-Walton and Anaglypta), and artificial marble and stone. Rev: T&C (Apr. 2000), p. 396.

Sara E. Wermiel. The Fireproof Building: Technology and Public Safety in the 19th-century American City. Johns Hopkins Univ. Pr., 2000. 328 pp., illus. \$39.95. From the first American attempts to fireproof in the 1790s to the steel and concrete high-rises of the early 20th century. When and why the materials of fireproof construction, including structural iron and hollow tile, came into use. Impact of building laws on the development of technology.

#### BRIDGES

- King Bridge Co. Web Site. www.kingbridgeco.com. Info on history of King Bridge Co. of Cleveland and location of extant company bridges.
- Gerald M. Kuncio. Golden Age in the City of Bridges.
  Western Pennsylvania History (Summer 1999), v. 82, 2, pp. 58-73. The building of Pittsburgh's great river bridges, 1924-1940.
- ▶ Paul Mariani. The Water Under the Bridge. *Preservation* (May/June 2000), pp. 24-31. Poet Hart Crane's fascination with the Brooklyn Bridge.
- William D. Middleton. Monuments of the Ohio. Trains v. 60,4 (April 2000), pp. 58-65. Building Ohio River railroad bridges at Metropolis, IL, designed by Gustav Lindenthal, and Sciotoville, OH, designed by Ralph Modjeski.
- ➤ David A. Simmons. A Lowell Perspective. *Timeline* (July/Aug. 2000), pp. 52-54. 1884 photo offers clues to the ill-fated history of bridge building over the Muskingum River at Lowell, OH.
- Spans in Time: A History of Nebraska Bridges. Nebraska State Historical Society & Nebraska Dept. of Roads, c. 1999. 112 pp., illus. \$25.95 ppd. Avail: Museum Store, Nebraska State Historical Society, Box 82554, Lincoln, NE 68501-2554; 1-800-833-6747.

#### MINES & MINING

- Brian Black. Petrolia: The Landscape of America's First Oil Boom. Johns Hopkins Univ. Pr., 2000. 248 pp., photos. \$42.50. The boomtown mentality justifies laying waste to the environment for "the common good."
- Roger Burt. Innovation or Imitation? Technological Dependency in the American Nonferrous Mining Industry.

#### CONTRIBUTORS TO THIS ISSUE

Richard K. Anderson, Jr., Sumter, SC; Lowell Angel, Honalulu, HI; Herman Brown, Grand Isle, VT; Erik Carlson, Providence, RI; Eric DeLony, Alexandria, VA; Don Durfee, Houghton, MI; Betsy Fahlman, Tempe, AZ; Alan Gardiner, Waterford, CT; Perry Green, Gainesville, FL; Mary Habstritt, New York, NY; Christopher Haga, Frederick, MD; Jay Harding, Macedon, NY; Duncan Hay, Charlestown, MA; Dean Herrin, Frederick, MD; Elliot Hunt, Hoboken, NJ; Arlene Johnson, Houghton, MI; Matthew A. Kierstead, Pawtucket, RI: Tom Mancl, Newark, DE: Christopher Marston, Washington, DC; Patrick Martin, Houghton, MI; John Meola, Richmond, VA; Carol Poh Miller, Cleveland, OH; Bob Newbery, Madison, WI; Richard O'Connor, Washington, DC; David Poirier, Hartford, CT; Fred Quivik, Alameda, CA; Bierce Riley, Morristown, NJ; Walter Sheppe, Akron, OH; John Teichmoeller, Ellicott City, MD; Louise Trottier, Ottawa, ON.; Paul Tsakopoulos, Bethlehem, PA; Robert Vogel, Washington, DC; Courtney Wilson, Baltimore, MD.

With thanks

T&C, v. 41,2 (April 2000), pp. 321-347. Ranges broadly over gold, silver, copper, zinc, lead mining to argue that American industry showed exceptional tardiness in creating or adopting innovations during the late 19th century.

- Paul Cloyd. The Doodlebug of Fairplay, Colorado. TICCIH Bulletin (Spring 2000) pp. 5-6. History of and efforts to preserve the 1941 dragline gold dredge.
- Rosalie L'Ecuyer. Prospecting and Mining Activity in the Rampart, Manly Hot Springs and Fort Gibbon Mining Districts of Alaska, 1894 to the Present Era. BLM-Alaska Open File Report 61.
- Jeremy Mouat. Metal Mining in Canada, 1840-1950. National Museum of Science and Technology (Box 9724, Station T, Ottawa, Ont. Canada K1G 5A3), 2000. Transformation Series 9. 125 pp., illus. \$20 US.
- Neville Ritchie and Ray Hooker. An Archaeologist's Guide to Mining Terminology. Autralasian Historical Archaeology v. 15 (1997), pp. 3-29.
- ➤ Tom Zoellner. Uranium Rush. I & T (Summer 2000), pp. 56-63. Prospecting for uranium on the Colorada Plateau in the 1940s and 1950s.

#### **IRON & STEEL**

- ➤ Captions for Photos in Blast Furnaces by Bernd & Hilla Becher (1990). In spite of the Becher's artistic intent to have the stunning blast furnace photos speak for themselves as images, John Teichmoeller and Michael Rabbit, in conjunction with members of the Railroad Industry Special Interest Group, have compiled detailed captions to the photos of North American blast furnaces in the Becher's 1990 book. The material is now available for viewing and output at the RRISIG's Web site: trak.to\rrisig.
- ➤ Julio M. Vidal Encinas. The San Blas Ironworks in Sabero, Leon: The First Coke Furnace in Spain. TICCIH Bulletin (Spring 2000), pp. 3-4. Results of archeological investigation of 1846 furnace.
- Benjamin Grillot. Faces of Steel. Digital exhibit features New Deal-era photographs of the people and history of the Acklin Stamping Plant, Toledo, OH. From Ward M. Canaday Center for Special Collections of the Univ. of Toledo Library. www.cl.utoledo.edu/canaday/acklin/index.html.
- ➤ Judith Scheffler. "... there was difficulty and danger on every side": The Family and Business Leadership of Rebecca Lukens. Pennsylvania History (Summer 1999). The problems faced by Lukens as she operated the ironworks that later became Lukens Steel. Despite opposition from her family, she took over the business after her husband died in 1825.

#### **T**EXTILES

- Lynn Zacek Bassett. Cooperative Quilting in New England, 1750-1850; and, Elizabeth Engel. Braided Rugs: A Surprising Forum for Progressive Reform. In ALHFAM Bulletin (Spring 2000), pp. 4-8. Research on traditional textile handcrafts turns up some unexpected interpretations of special use at living history sites.
- Susannah Handley. Nylon: The Story of a Fashion Revolution. Johns Hopkins Univ. Pr., 2000. 192 pp., photos. \$29.95. Nylon debuted at the 1939 NY World's Fair. Synthetics in fashion, chemical innovation, and national pride following the deprivations of WW II.

- ➤ John Kifner. Museum Brings Town Back to Life: Converted Factory Is Economic Catalyst for Massachusetts City. NY Times, May 30, 2000, p. A-14. Sprague factory complex in North Adams is adaptively reused to showcase large modern artworks. The project was opposed as a \$35 million boondoggle when conceived and financed in the early 1990s, but it has turned the dying industrial city around with more than 130,000 visitors during its first year of full operation.
- Luca Mola. The Silk Industry of Renaissance Venice. Johns Hopkins Univ. Pr., 2000. 480 pp., illus. \$48 hc. Innovations Venetians made in manufacturing and marketing to advance the silk industry. Rapidly changing fashions created jobs for craftsmen, weavers, and merchants.
- Geoffrey Timmins. Housing Quality in Rural Textile Colonies, c. 1800-c.1850: The Ashworth Settlements Revisited. IA Review v. 22,1 (2000), pp. 21-37. Archeology at Ashworth Brothers, cotton spinners near Bolton, England, suggests an overstated reputation for the quality of the housing provided to workers.

#### **AGRICULTURE & FOOD PROCESSING**

- Tony Crosby. The Development of Malthouses around the Hertfordshire-Essex Border. IA Review v. 22,1 (2000), pp. 39-51. Changes in malthouse design and architecture brought about by changes in the brewing industry, transportation, and sources of equipment, building materials, and fuel from 17th to 19th c.
- David Vaught. Cultivating California: Growers, Specialty Crops, and Labor, 1875-1920. Johns Hopkins Univ. Pr., 1999. 240 pp., maps, fig. \$38. Case studies of raisins in Fresno County, tree fruit in Placer County, and almonds in Yolo County.

#### **ABBREVIATIONS:**

ALHFAM	= Assoc. for Living History, Farm and Agricultural
	Museums
I&T	= American Heritage of Invention & Technology
IA News	= Industrial Archaeology News (UK)
IA Review	= Industrial Archaeology Review (UK)
MHR	= Material History Review (CAN)
R&LHS	= Railway & Locomotive Historical Society
T&C	= Technology & Culture: Quarterly of the Society for the
	History of Technology
TICCIH	= The International Committee for the Conservation of
	the Industrial Heritage

**Publications of Interest** is compiled from books and articles brought to our attention by you, the reader. SIA members are encouraged to send citations of new and recent books and articles, especially those in their own areas of interest and those obscure titles that may not be known to other SIA members. Publications of Interest c/o the **SIA Newsletter**, 305 Rodman Road, Wilmington, DE 19809.

We endeavor to make citations as complete as possible, but they are from a variety of sources, and are sometimes incomplete. If a date, publisher, price, or other statistic is missing, it simply means that it was unavailable, and, unfortunately, we do not have the time to track down these missing bits. The SIA, unless otherwise noted, is not a source for any of the cited works. Readers are encouraged to use their library, bookstore, computer, or school for assistance with locating books or articles.

# **Cornwall's Industrial Heritage**

## SIA Study Tour, September 1-10, 2001

with optional pre-extension to the Great Dorset Steam Fair, Aug. 30-Sept. 2

he legacy of tin and copper mining has left hundreds of stone engine houses with tapering corner chimneys on the Cornish landscape in southeastern England. A ten-day SIA study tour will include an in-depth exploration of Cornwall's mines, pump houses, engine houses, and tramways, supplemented by evening lectures, historian-led visits to museums, and the Camborne School of Mines. Participants will discover the significance that Cornwall holds in the history of industrial archeology as the birthplace of many early innovations in mining and steam-power technology, not to mention the origins of one of the SIA's favorite foods, the pasty.

Tin for alloying with copper to form bronze, and with lead to produce pewter, has been mined in Cornwall for over 2,000 years. And, as was discovered in the early 19th century, a thin layer of tin on iron sheet provides a combination of sterility and strength ideal for food canning. The high demand for tin led Cornwall's miners to dig deep underground, and the problems of draining the mines brought forth many important developments in steam pumping engines. The skills and technologies Cornish miners learned in their homeland were exported to mining regions all over the world, including North America where the immigrant mine captains were highly sought. Cornish tin mining reached its peak in the second half of the 19th century, but faced significant competition from foreign sources of tin, particularly Malaysia, in the 20th century. Tin mining is almost extinct in Cornwall today.

On the study tour's itinerary are the **Blue Hills Tin Streams**, a knock-your-socks off site with working ore stamps, ball mill, buddle, and shaker table, all powered by water from a hillside leat, or raceway. They are streaming waste sands from several hundred years of working alluvial sands. At the **King Edward Mine**, participants will see an extensive collection of historic surface equipment, including a grizzly, a set of Cornish stamps (round head), and a set of California stamps (square head), a Cornish round frame, knockers, and buddles. **Geevor Mine** worked up until the late 1980s, when it was converted to a museum. There will be a short underground tour and lots of time to explore above ground.



Stone engine houses perch on the Cornish coast at Botallack in the St. Just mining district where tin mines stretched under the sea.

Of course, there will be steam pumping engines, some of the largest in the world. The 80-in cylinder pumping engine of **Robinson's Shaft** in Pool, built in 1854, and the 90-in cylinder Harveys pumping engine at **Taylor's Shaft** in East Pool, built in 1892, are both running on compressed air. The **Levant Engine**, a 24-in rotative beam winding engine is the oldest surviving engine in Cornwall, and it runs on live stream. The Trevithick Society, devoted to preserving Cornish steam engines, mans them all and will have their best interpreters on hand for the SIA.

To complement the ten-day program in Cornwall, an optional pre-extension has been arranged to explore the **Great Dorset Steam Fair** in its 33rd anniversary in Blandford, the heart of the beautiful Dorset countryside. This is the largest collection of steam and vintage equipment anywhere. It's an experience not to be missed!

Academic Travel Abroad (ATA), which has worked successfully in the past to offer SIA study tours to Panama, Scotland, and China, will be serving as the tour's agent with coordination provided by Bierce Riley of the SIA's board of directors. Bierce has been to Cornwall twice on her own to scope out the lay of the land and find some out-of-the-way treasurers. The tour will be limited to a maximum of 30 participants (must be SIA members) with an anticipated cost including airfare of \$3,175 for the Cornwall Tour and \$775 for the Dorset Steam Fair pre-extension. All hotels will be first-class accommodations and, although packed with adventure, the overall pace will be moderate, with time to soak up the local culture. A mailing will be sent to the membership in early 2001.



Fifty showmen's engines generate electricity at the Great Dorset Steam Fair, although the carousel in the background has its own steam engine in the center. The world's largest showing of engines, which attracts over 200 working steam engines, is held on a 500-acre site.



Colin Wills describes the operation of his convex buddle at the Blue Hills Tin Streams, where alluvial sand is still processed by historic methods in a working museum environment.

# **Historic Bridges News**

There have been many accomplishments and new initiatives in the area of historic bridges recently, judging by the press releases, announcements, newspaper clippings, letters, and emails directed to the *SIAN* in the past months. Following is a sampling from items that have lately crossed the editor's desk. Could this be called a historic bridge movement?

The Federal Highway Administration is sponsoring a new program of research in the area of **historic covered bridge preservation** pursuant to the 1998 Transportation Enhancement Act. Among the proposed projects are a manual for inspection, repair, rehabilitation, and restoration; identification of preservative treatments and fumigants; strengthening historic covered bridges to carry modern traffic; fire retardant treatments; a cost/benefit study on preservation of covered bridges; and an educational guide to the history of covered bridges for school children. FHWA anticipates that \$1 million will be dedicated to the program in 2000-2001.

The project to restore the Aldrich Change Bridge (SIAN, Summer 1998/Summer 1999), the 1858 cast- and wrought-iron truss bridge that once carried the towpath of the Erie Canal at Palmyra, New York, is nearing completion, with a ribbon-cutting ceremony possible this fall. Contracts have been let for the iron work, including recasting several vertical members and fabricating some new wrought-iron pins and lower-chord links. The bridge will carry a recreational trail of the NY State Heritage Trail System that follows sections of the old Erie Canal. Jay Harding, who spearheaded the effort to save the bridge after it collapsed into a creek in 1996, reports that there have been some unanticipated problems, such as difficulties with the various funding agencies and contractors, but there has been some luck as well, as when a group of volunteers unexpectedly unearthed sections of the bridge's old stone abutment with the hope now that the stones can be salvaged and reused. The bridge, based on a design by Squire Whipple, is believed to be the oldest cast- and wrought-iron truss bridge in New York, and one of the oldest in the nation.

The Stillwater Bridge (SIAN, Fall 1997), a 1931 vertical-lift highway bridge over the St. Croix River on the Wisconsin-Minnesota border, remains the subject of intense controversy although it now appears that a compromise plan to preserve the bridge will be worked out. The fate of the bridge, which made the 11-most-endangered-historic-sites list of both the National Trust and the Preservation Alliance of Minnesota, has been in limbo for more than four years as officials have tried to find ways to build a new bypass bridge, preserve the old bridge, and meet the requirements of a National Park Service policy that limits bridges over rivers protected by the National Wild and Scenic Rivers Act. The Park service has said that removing the National Register-listed bridge is required to lessen the adverse effects of the proposed new bridge on the environment. Historic preservation groups from all across the country have followed the project because the Park service has placed itself in the position of saying that the environmental concerns in this project outweigh the agency's responsibilities for working to preserve historic resources. The St. Paul Pioneer Press (June

2000) reports that the Stillwater City Council has stepped into the fray, offering a compromise plan. The council has voted to take ownership of the historic bridge if Minnesota DOT completes \$5.4 million in necessary repairs. The city would preserve the bridge for pedestrian and bicycle use only, thus opening the way for the construction of the new bridge. In ten years time, the city would remove an approach span, converting the bridge to a fishing pier as a requirement of the Park Service that the old bridge eventually be closed. A final decision had yet to be made at press time.

Henszey's 1869 Wrought-Iron Bowstring Arch-Truss **Bridge** in Wanamakers, Pennsylvania, is slated for renovation and relocation from its current site on a local road to a recreational trail at Central Pennsylvania College. The college wants the bridge "for its beauty, for its environmental quality, for its function, and to preserve a piece of antiquity," according to president Todd Milano. The college is working in concert with the local historical society and the township to find a new site for the bridge because it is no longer adequate for vehicular traffic. The patented Joseph J. Henszey bowstring resembles the better-known tubular tied-arch design of Thomas Moseley, but has slightly different chord members and truss arrangement. Henszey's bridges were fabricated by the Continental Bridge Co. of Philadelphia. The Wanamakers bridge is the longest and most complete of two known surviving examples in Pennsylvania.

The **Calhoun County Historic Bridge Park** in Battle Creek, Michigan, completed restoration of its first metal truss bridge in March. The innovative concept of the park is to rescue deteriorated or functionally inadequate metal truss bridges, which can no longer serve vehicular transportation, by restoring and rehabilitating them for use in a park dedicated to their preservation. The county has an ISTEA (Intermodal Surface Transportation Enhancement Act) grant for the restoration of five bridges. The restored bridges will be placed on a pedestrian path where they will be part of an interpretive outdoor exhibit on Michigan's transportation history and the technology of iron and steel fabrication. As part of the restoration process, living history demonstrations are offered on forge welding and blacksmithing, heating and straightening, and riveting.

The 1885 Lenticular Truss Bridge over the Sacandaga River in Hadley, New York, has been given a reprieve from demolition by county supervisors following a letter-writing campaign by preservationists, school children, and state engineering societies. The 136-ft.-long wrought-iron bridge is a rare example of its type, as the roadway is carried through the truss at midheight. It has been closed to traffic since 1983. According to the *Glens Falls Post-Star*, preservationists hope that a grant will be forthcoming from the Preservation League for a study on how to rehabilitate the bridge for pedestrian and emergency vehicle use. The county commission, whose primary goal is to build a new bridge, has forestalled a decision on dismantling the bridge giving historic bridge advocates time to raise money.

# Schroeder Saddletree Factory Restoration Under Way

he restoration of the Ben Schroeder Saddletree Factory in Madison, Indiana, is under way, and the results are impressive. The Bench and Blacksmith Shop, which was sagging when the SIA visited during the 1994 Fall Tour, has been carefully jacked back to level, new framing has been installed, and windows and doors have been repaired. Siding has been patched, and a new roof, matching the original, has been installed. Even the original electrical lighting system has been restored to replicate historic working conditions inside the shop. The Bench and Blacksmith Shop housed the operations of fitting, gluing, assembling, and painting saddletrees, the internal wood frames of saddles. Schroeder shipped tens of thousands of saddletrees to scores of saddlemakers throughout the U.S. and the Western Hemisphere. The factory doors closed in 1972 after 94 years in operation when the last family member passed away.

This industrial gem, now a property of Historic Madison, Inc., was preserved intact with the goal of opening it to the public as an operating museum of industry where visitors will see vintage saddletree machinery in use. Plans also are in the works to demonstrate machines that produced other company products, such as clothespins, hames (two curved pieces lying upon the collar in the harness of an animal), and pack-saddle frames.

During the past seven years, Historic Madison staff, volunteers, and interns have spent thousands of hours cleaning, sorting, and inventorying the many thousands of artifacts that the Schroeder family saved and stored in the factory. The family used scrap wood and cardboard from cereal boxes for patterns, sawdust and shavings for fuel, aluminum pie tins for lighting fixture reflectors, and old clothes to chink leaks around windows, pipe, and ductwork. They saved business records, dating to the 1870s, mortgage papers, insurance documents, lumber lists, petty cash slips, invoices, and canceled checks. Sales and purchases were recorded in leather-bound ledgers. Hand tools by the hundreds, old cans of paint, boxes of washers, kegs of nails, saddletree parts, and lumber littered the floors and attics of the 4,000sq.-ft. factory. Everything salvageable was saved and moved into storage to make way for the restoration carpenters. Now, the task of reinstalling all of these bits of history, to show visitors what the Bench and Blacksmith Shop looked like during its working days, has begun.

In the upcoming year, the Woodworking Shop, which includes a machine room, boiler room, engine shed, and sawmill, will be restored. In the Woodworking Shop, the Schroeders and their workers shaped saddletree parts from rough-sawn lumber. The building houses a large collection of woodworking machinery, much of it customized to meet the unique needs of saddletree manufacturers. The project includes the removal, cleaning, and repair of the machinery, the electric motors, and the sawdust blower system. The building will be carefully restored, the machinery reinstalled, and the original motors energized by a new electrical system.

The adjacent Schroeder residence will then be carefully rehabilitated and used for exhibits about the family and their business. Also included will be a gift shop, an admissions area, and office space.

The contractor for the Bench and Blacksmith Shop was Olentangy Restoration of Marion, Ohio. The project architect was John Bowie Assoc. of Media, Pennsylvania. The restoration is made possible through a transportation enhancement award from the Indiana DOT, and grants from the Lilly Endowment, Ogle Foundation, Horn CINergy Foundation, Foundation, Schroeder Foundation, Yunker Foundation. Historic Madison Foundation, and numerous individual contributors. Additional funds are required to underwrite exhibits, educational programs, artifact inventory, and conservation research. Info: John Staicer. 500 West St., Madison, IN 47250; (812) 265-3426; Web site: www.imh.org/imh/saddle/home.html.

J. S.



Bench and Blacksmith Shop, before (top) and after (bottom) restoration.



Interior of the Bench Shop, before (top) and after (bottom) restoration.



Schroeder workers and saddletrees, ca. 1880.

# Study Tour of the Ruhr Visit the "Land of Coal, Steel, and Beer!" March 2001



Imaginative scupture made of recylced industrial building foundations, erected on coalmine waste tip near Gilsenkirchen.

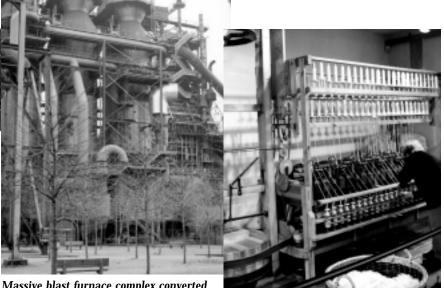
lans are under way for an SIA-sponsored study tour of Germany's Ruhr district in March 2001. After an exciting visit last year, I decided to organize a return trip for SIA members. The Ruhr is the heartland of German industrialization with a critical concentration of minerals, transportation, technology, and population to support one of the world's premiere industrial centers. In addition to extensive

steel mills, coal mines, manufacturers, and transportation systems, the Ruhr boasts what is arguably the world's most progressive and aggressive industrial heritage scheme. **The Route of Industrial Heritage** is a system of interconnected sites that is a model arrangement for integrating industrial, cultural, and natural land-scapes in a way that serves preservation and interpretive goals.

The Route is a conglomeration of about 50 sites scattered over the Rhein and Ruhr Valley region of southwestern Germany in the area of Duisburg and Bochum, near Dusseldorf. The sites are tied together through geography, history, and a common concept of heritage interpretation. They range from intact blast furnace complexes to coal mine waste tips developed as scenic viewing platforms, from working cutlery factories to regional industrial museums, from massive coal mine complexes to an enormous gasholder, and from extensive communities of workers' housing to the Krupp family mansion. The scale, integrity, and standard of preservation evident in these sites is remarkable. There are also a number of related matters to explore, including the return of natural ecosystems following intensive industrial development, the integration of the arts into industrial heritage management, and even the new Neanderthal Museum for the archeologists in the group!

While the sites on the Route are operated independently by various agencies, they are coordinated through a central agency and share common design and interpretive elements. Our guide for the tour will be Dr. Wolfgang Ebert, the prime architect and director of the Route, a Ruhr native with considerable expertise and enthusiasm. The organizational scheme of the heritage route itself is worth the visit.

Tentative dates for the tour are March 3-11, on the "shoulder" of the high travel season, early spring in Germany. While we



Pat Martin photos

Massive blast furnace complex converted to public landscape park over 6 kilometers in length.

Exact replica of Arkwright's spinning machine at Cromford, near Ratingen, established in 1783 and thus Europe's first factory.

might see some rain, there will also be flowers, and the airfares should be relatively low. Since several potential tour attendees have expressed interest in independent travel to Germany, we will expect individuals to make their own travel arrangements to and from Dusseldorf, where we will begin the tour. We will travel the Route by motor coach, staying in three star accommodations, in either double or, for an additional fee, single rooms. Meals and entrance to the sites will be included in the single tour fee, which we expect to amount to approximately \$1,250 per person (the precise cost will not be set until after January 1, but should not vary significantly).

**Register Your Interest Now!** This tour will be limited to one busload, a maximum of 50 persons, so you should register as soon as possible with me (Patrick Martin) at SIA Headquarters, Dept. of Social Sciences, Michigan Technological Univ., 1400 Townsend Dr., Houghton, MI 49931; (906) 487-2070; fax 487-2468; e-mail: *pem-194@mtu.edu*. More details should be available by the time of our Fall Tour in Ontario, and I'll make a presentation at that meeting.

Meanwhile, check out the Route of Industrial Heritage of the Ruhr ("route industriekultur") on the worldwide web at http://www.route-industriekultur.de/steuer/start/new\_win.htm. (Don't worry, you can select an English version of the critical parts of the text!)

*P. M.* 

# **SITES & STRUCTURES**

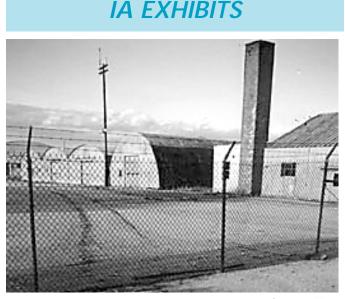
**Good News for the Pullman Factory.** The State of Illinois has announced the release of \$10 million for the exterior reconstruction of the administration building, north factory building, and rear erecting shops, which were damaged by fire in December 1998 (*SIAN*, *Winter 1998*). George Pullman built the factory for the manufacture of railroad passenger cars in 1880. The factory and its surrounding town are considered one of the earliest and most significant fully planned industrial communities in the United States. The fire gutted the administration building and clock tower, and damaged portions of adjacent buildings, but enough of the brick exterior walls has survived in stable condition to make reconstruction possible.

The Samuel Knight Chapter Newsletter reports that the future of the Knight Foundry has been secured with its purchase by two dedicated preservationists. The new owners, Richard and Melissa Lyman, are firmly committed to supporting the operation of the foundry as a center for preserving historic iron-working skills, as an operating iron works providing hard-to-get cast-iron products for historic preservation, and as a living history experience for visitors and students. The Lymans have purchased the foundry for a newly organized non-profit group to operate under a lease with breathing space to accumulate capital and a fund for preservation programs. The chapter joined in a grand opening celebration on July 1. Established in 1873 by Samuel Knight and George Horne, Knight Foundry was known for the production of water wheels and associated waterpower equipment for mines, mills, and ranches. Through more than 120 years of operation, the foundry and its shops were never converted to electric power. The future of the foundry came into question after an earlier non-profit organization that operated it as a living classroom decided not to renew its lease in 1996 (SIAN, Summer 1996). The previous owner, Carl Borgh, passed away, but his heirs were patient and generous in supporting the effort to find new owners and financing.

**Granitoid Street Pavement** is the subject of a preservation project in Duluth, Minnesota. Granitoid, an early 20th century paving material that is an aggregate of concrete and granite chips with a surface stamped in a brick pattern to provide stable footing for horses, was laid by a real estate developer in 1909-10 on a fourblock section of Sixth and Seventh streets. When the city council announced plans last year to pave over the granitoid street, local resident Carolyn Sundquist led a campaign to preserve the pavement. Research led to the conclusion that it was the oldest concrete pavement in Minnesota. In April, road crews poured test patches and successfully duplicated the granitoid as part of a project that will repair the pavement rather than replace it.

The **Calumet Plant of R. R. Donnelly Co.** (Lakefront Press) in Chicago, visited during the 1991 SIA annual conference, has stood empty since 1993, but it is now being adaptively reused as a "carrier hotel," a building for housing the equipment of multiple telecommunications and Internet companies, according to a *NY Times* article (June 11, p. Y-46). The plant, built in four sections between 1912 and 1929, once was the largest commercial printing facility in the country, producing such publications as *Life*, the

Sears catalogue, and the Yellow Pages. The 1.1 million square feet of space will be ideal for the unusual operating requirements of telecommunications equipment including multiple power sources, numerous ventilation outlets, and floors capable of handling heavy loads. The building is also within blocks of a major transcontinental fiber-optic cable route. The eight-story, English Gothic-style factory is embellished with decorative stone shields depicting printers' tools and marks. The developers plan to restore the exterior architectural features, as well as the interior executive offices and library, which will be used by tenants for meetings.



Quonset Huts.

Advancing the Post-Military Landscape is an exhibit of 50 photographs documenting the Quonset Point Naval Air Facility and Davisville Naval Construction Battalion (Seabees) Center in Rhode Island. Quonset Point and Davisville, established by the navy in 1940-41 and closed in the 1970s and 1990s respectively, have many Albert Kahn-designed buildings, but they are best known in architectural history as home of the Quonset Hut, a half-cylindrical framework building covered by corrugated sheet metal. Prefabricated Quonset huts filled the need for movable and quickly erectable military buildings during World War II. They also found popularity for civilian uses in the late 1940s and 1950s. The naval facilities retain their barracks, manufacturing facilities, recreational sites, and outposts, but they are slated for demolition to make way for development. The exhibit will open at Gallery Agniel, Providence, in August 2000, then travel to the Rhode Island Historical Society, Providence (Winter 2000); Courthouse Center for the Arts, West Kingston (Feb. 2001); and the Museum of Work and Culture, Woonsocket (July 2001).

## **NOTES & QUERIES**



Does anyone recognize this object?

**Does Anyone Recognize This Object?** This large casting was buried for many years in a scrapyard in Ashland, Virginia. The origin and purpose are unknown; its weight is about five tons. The lower housing has a machined surface with a ring of bolt holes. The large bellshaped chamber has a pipe running longitudinally through its center. Four 6-in.-diameter bolts extend through the corners, and they are thought to be part of a slide mechanism or perhaps a lower piston housing attachment. The part may have come from a steam-powered hammer or press. John J. Meola, Box 3001, Richmond, VA 23228; e-mail: *jmeola7755@aol.com*.

The Theatre Historical Society of America (THSA) announces its 16th Annual Jeffrey Weiss Award Competition for papers that reflect original research on aspects of American theatres (architecture, history, decoration, operation, or equipment). Papers that include historic photographs or illustrations are encouraged. The 1st prize is \$500 and the 2nd prize is \$300. Winning entries are published in Marquee, the quarterly journal of the THSA. Deadline is Dec. 31, 2000. The 1,000-member THSA is a nonprofit organization, founded in 1969, that is dedicated to documenting the history of America's theatres, including of interest to SIA members, the impact of mechanical systems like air conditioning, and construction techniques like steel framing and roof trusses. It operates the American Movie Palace Museum and American Theatre Architecture Archive in Elmhurst, Illinois. The archive contains material on over 8.000 theatres in the U.S. Publications include the quarterly illustrated journal, a special illustrated annual report, and a quarterly newsletter. There are annual meetings in different parts of the country. Membership is \$45 individual, \$25 student. For info on the Jeffrey Weiss competition or membership: Richard Sklenar, Exec. Dir., THSA, 152 N. York Rd., 2nd Flr., Elmhurst, IL 60126-2806; (630) 782-1800; email: execdir@historictheatres.org; Web site: www.historictheatres.org.

**Call for Papers, 2001 Hagley Fellows Conference.** *Consumption and the Environment* is the theme of the March 9 conference at the Hagley Museum & Library, Wilmington, Delaware. Papers are solicited from a range of disciplines including environmental history, industrial history, and urban studies. All papers should have a historical perspective that addresses issues of how the urban and natural environment is shaped by the choices we make as groups and individuals about what products and goods to consume. Also of interest are papers that explore the impact of ideas about pollution and the environment on consumer choices. Proposals should include an 800-wd. abstract and one-page CV. Info: Tom Mancl, Hagley Fellows, Univ. of Delaware, 236 Munroe Hall, Newark, DE 19711; e-mail: tmancl@udel.edu.

### NORTHERN OHIO SIA CHAPTER FORMED

In response to a call from Carol Poh Miller and William Barrow, 16 SIA members and friends met at Cleveland State University on Feb. 27 to form the new Northern Ohio Chapter. Walter Sheppe was chosen president, William Korecko vice president, William Vermes secretary, and Nancy and William Hachtel co-treasurers. The chapter was formally recognized by the SIA Board at the Duluth meeting in June.

Tours and other activities are being planned. The first chapter activity was a tour on Aug. 5 of the Central Facility of Cleveland Track Material, Inc., which produces a wide variety of railroad track products, including hook flange guard rails, composition joints, splice bars, and track assemblies. A highlight of the tour was a late-19th-century rolling mill purchased by CTM from the Tredegar Iron Works in Richmond, Virginia, believed to be the oldest operating rolling mill in the U.S. CTM occupies the 1901 Wellman-Seaver-Morgan Co. plant. Wellman manufactured some of the largest materials handling facilities ever built, including all of the great Hulett iron-ore unloaders that once dotted the ports on the Lower Great Lakes.

To date, the chapter has 34 members. Membership is open to anyone with an interest in the IA of northern Ohio. For information on membership contact Nancy Hachtel, (410) 951-6069; e-mail: nanwm@juno.com.

W. S. & C. P. M.

# **CALENDAR**

### 2000

Oct. 11-13: Preserving the Recent Past II, Philadelphia, PA. Info: Box 75207, Washington, D.C. 20013-5207. Web site: www2.cr.nps.gov/tps/recentpast2.htm.

Oct. 12-14: Pioneer American Society Annual Conference, Richmond, VA. Theme: 19th-Century Industrial Development. Historic industrial sites tour, river cruise. Info: Marshall E. Bowen, Geography Dept., Mary Washington College, Fredericksburg, VA 22401; (540) 654-1493; fax, 654-1074; email: mbowen@mcw.edu.

*Oct.* **19-22:** *SIA Fall Tour, Sarnia, Ont.* The Ontario oil district, including Petrolia Discovery, the Oil Museum of Canada, the Don gas field, and Fairbank oil. Tour HQ will be in Sarnia, across the Blue Water Bridge from Port Huron, MI. Registration materials have been mailed to all SIA members. Limited to 90. Info: Petrolia Discovery (519) 882-0897.

### 2001

Apr. 20-22: Annual Meeting of the Business History Conference, Miami, FL. Paper proposals requested on the theme, Services and the Global Economy, including finance, utilities, trade, retailing, transport, advertising, tourism, entertainment, and crime. Info: Roger Horowitz, BHC, Box 3630, Wilmington, DE 19807; (302) 658-2400; www.eh.net/bhc.

May 10-13: SIA 30th Annual Conference, Washington, D. C. Hosted by the Montgomery C. Meigs Original Chapter. Deadline for paper proposals is Dec. 31, 2000. See article elsewhere in this issue. Info: Christopher Marston, HABS/HAER, (202) 343-1018; e-mail: christopher\_marston@nps.gov. or Dean Herrin, (301) 624-2773; e-mail: dherrin@fcc.cc.md.us. ■

## **CHAPTER NEWS**

Northern New England held its spring meeting Downeast at Pembroke, Maine, on June 3. The chapter toured the site of the Pembroke Iron Works, the Sardine Museum at Lubec, and Raye's Mustard Mill, the Quoddy Tidal Dam model, and the Maritime Museum at Eastport. The chapter's annual membership meeting and fall tour will be held on Sept. 16 in Portland. Tour highlights are scheduled to include the Portland Harbor Museum, the Maine Historical Society for a view of some IA archival collections, the recently restored Portland Observatory (the last port signaling station), and buildings of the Portland Co., builder of locomotives, marine engines, etc.

**Southern** and the Sloss Furnaces Association have been holding a joint lecture series. In June, Bobby Wilson, professor of geography at University of Alabama Birmingham (UAB), gave a talk on his new book America's Johannesburg: Industrialization & Race. In July, UAB history professor Colin J. Davis presented "On the Waterfront—New York City and London Longshoremen: A Study of Connections and Differences."

**Oliver Evans** (Philadelphia) viewed the world of the streetcar with the help of chapter member Joel Spivak, who presented an illustrated talk on transit architecture in June.

**Roebling** (NY-NJ) spent the summer exploring New York from the water. In July, they cruised Newtown Creek, on the boundary between Brooklyn and Queens, learning how this area developed from marshland to a flourishing industrial center, including the site of Phelps Dodge [copper] Refining Co. They also joined with the Brooklyn Center for the Urban Environment for cruises of the Gowanus Canal, and took a tour of the islands of New York City—some famous, like Ellis, some infamous, like Rikers, and others forgotten, like North Brother. The chapter's effort to explore New York Harbor defense facilities continued with a visit to Fort Hancock at the north end of New Jersey's Sandy Hook.

**Samuel Knight** (California) held its annual meeting in conjunction with the grand opening celebration of the Knight Foundry in Sutter Creek (see article elsewhere in this issue). Chapter members have also been working on developing tours of Marin County maritime sites, the Black Diamond Mine, Folsom Power House, the last remaining working gold dredge in the region, and a Portland cement plant.

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SOCIETY FOR INDUSTRIAL ARCHEOLOGY

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