



SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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Numbers 2-3

High Line

In New York City a project is under way to save a historic viaduct, all that remains of Manhattan's only all-freight railway. Now known as the High Line, it runs for 20 city blocks along the western edge of lower Manhattan through the Chelsea neighborhood and the Gansevoort Meat Market district. Once an area of factories and warehouses, Chelsea is now a vibrant neighborhood mixing art galleries and artists' studios with residential lofts. The Gansevoort Meat Market, the city's most recently designated historic district, still contains many meat processing businesses now interspersed with nightclubs and restaurants. With the shadow of the High Line overhead, these neighborhoods retain an industrial grittiness that many find appealing.

After merging several smaller railroads in the 1860s to form the New York Central & Hudson River, Cornelius Vanderbilt, the millionaire who

built one of the largest transportation networks in North America, held two rail routes into Manhattan. In 1871 he consolidated passenger operations on the east side, culminating at Grand Central Depot, and dedicated the west-side line to freight. The West Side Freight Line was 13 miles long and ran between Spuyten Duyvil, just north of Manhattan, and St. John's Park, south of Canal Street.

It soon developed dense traffic even though it operated under severe handicaps, the greatest of which were a lack of space for freight yards and the need to locate much of the track on Tenth and Eleventh avenues. When the tracks were laid in the 1840s, much of the land was open fields. By the 1920s, the trains were sharing the avenues with pedestrians, horsedrawn wagons, and automobiles, and the conflicts became intolerable.

Even with a horseman carrying a red

(continued on page 2)



The High Line's very heavy construction is in evidence before the reinforced concrete deck is laid down. March 13, 1933.

HIGH LINE *(continued from page 1)*

flag preceding each slow-moving locomotive down Tenth Avenue, so many accidents occurred that the street became known as "Death Avenue."

The city and the railroad agreed to separate the tracks from the street. The viaduct was built between 1929 and 1934 as the first stage of a larger project called the West Side Improvement, which eliminated 105 grade crossings. The New York Central's engineers not only eliminated the problem of dangerous traffic, but also found ingenious solutions to the problems of delivering freight cars to sidings built at the 2nd or 3rd floor levels of the factories and warehouses alongside. Several buildings still have tracks running into or through them. Much of the freight carried was foodstuffs, giving the railway the nickname, "Life Line of New York." Farther north, it went through a cut, or subway, from 35th Street to 60th, over which Riverside Park was built. This sunken portion of the line is now used by Amtrak.

With the building of the interstate highway system and the growth of trucking, railways were used less to carry freight. The St. John's Park terminal was closed in 1960. The last freight train made its way over the High Line in 1980, and it has remained abandoned since. A developer was allowed to demolish the southernmost one-half mile. In 1992, a group called the Chelsea Property Owners (CPO), made up of business owners whose buildings were under or next to the remaining 1.5-mile long High Line, was granted a conditional abandonment by the government. This agreement allow it to



The High Line at its northernmost end, curving over the 30th St. Rail Yards. (The yards are still in use by Amtrak and the Long Island Rail Road.) June 3, 1933. All photos originally taken for the George A. Fuller Co., builders who worked in association with the American Bridge Co. on the project.

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 biannually. The SIA through its publications, conferences, tours, and projects encourages the study, interpretation, and preservation of historically significant industrial sites, structures, artifacts, and technology. By providing a forum for the discussion and exchange of information, the Society advances an awareness and appreciation of the value of preserving our industrial heritage. Annual membership: individual \$35; couple \$40; full-time student \$20; institutional \$50; contributing \$75; sustaining \$125; corporate \$500. For members outside of North America, add \$10 surface-mailing fee. 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.sia-web.org.

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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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demolish the viaduct as long as Conrail's contribution was capped at \$7 million and CPO could cover all additional costs and indemnify Conrail against any claims related to abandonment or demolition. Ownership of the High Line has since passed from Conrail to the railroad companies CSX Transportation and Norfolk Southern. CPO was not able to meet the costs of the conditional abandonment terms and the viaduct continued to stand.

In the meantime, wildflowers and trees have sprung up along the tracks, creating a wilderness in the city. The Friends of the High Line (FHL), a private nonprofit organization formed in 1999, has proposed that a park be placed on the viaduct to provide open space in an area of the city with few parks. The Promenade Plantée in Paris, a viaduct in the 12th arrondissement that has been converted to a three-mile long pedestrian park, has served as inspiration, as has Minneapolis's Stone Arch Bridge. The group's founders, Joshua David and Robert Hammond, look forward to a unique world-class park design. An international design competition attracted 720 entries from 36 countries and culminated in an exhibition at Grand Central Terminal last July. Selected design teams are now responding to a Request for Proposal and finalists will present their proposals at an exhibition this July 15.

The project has gained much support from the public and from local government in the past year. The city government committed \$15.75 million to planning and construction and has made the park a centerpiece of redevelopment plans for the neighborhood. The city also requested that a Certificate of Interim Trail Use (CITU) be approved by the federal government under the national Rails-to-Trails program. This would maintain the property easements along the rail line should restoration of rail service be desired in the future, but it would allow the High Line to be used as a parkway in the interim. New York City would take responsibility for the property, while FHL would build and maintain the

SIA Awards Industrial Heritage Preservation Grants

The SIA Grants Committee is pleased to announce the award of the Society's first two Industrial Heritage Preservation Grants. A grant of \$1,375 has been awarded to the **Montague Association for the Restoration of Community History (MARCH)** and \$1,377 has been awarded to the **Schoharie River Center**.

MARCH will use the funding to conduct research and prepare a National Register of Historic Places (NRHP) Registration Form to expand the existing Millville Historic & Archaeological District in Montague Township, Sussex County, NJ. The district is listed in the NRHP and is in the New Jersey State Register as well. Millville is a small 19th-century industrial hamlet containing several buildings, structures, and sites. The proposed expansion is to include resources associated with the district such as the mill's water-power systems and the farmsteads of former mill owners. MARCH is a local non-profit historical society. Professional support will be provided Dennis Bertland Assoc. and Richard Veit [SIA], winner of the SIA's 2003 Vogel Prize.

The Schoharie River Center proposes to use the SIA grant to conduct an archeological and educational outreach program focusing on the industrial heritage of the village of Burtonville, Montgomery County, NY. The investigation fea-

tures several 19th-century mill sites on the Schoharie Creek. Students from local schools will participate fully in recording archeological data and arriving at conclusions about water-power management and the historical landscape of the village in its industrial prime. Public dissemination of the results will take the form of school and library presentations, articles, and papers. This is the second year that students between the ages of eight and thirteen will be able to participate. Professional archeological support will be provided by Hartgen Archeological Assoc. The Schoharie River Center is a non-profit organization.

Recipients of the SIA Industrial Heritage Preservation Grants are required to provide SIA with auditable accounts of the money expended, two copies of products generated from the funded project, and a written report for SIAN or IA. The SIA grants support the research, documentation, and preservation of industrial sites and practices. Interested parties are encouraged to contact a member of the grant committee for further information or check the SIA Web site (www.sia-web.org). The SIA grant committee consists of Bode Morin (313-297-8380; bodemorin@msn.com), Lynn Rakos (212-264-0229; lrakos@hotmail.com), and Bob Stewart (860-668-2928; Robert.stewart13@worldnet.att.net).

HIGH LINE (continued from page 2)

park, ala the Central Park Conservancy, once the CITU is granted. Former SIA board member Mary Habstritt represented the SIA and Roebling Chapter in support of the CITU at the July 2003 Surface Transportation Board hearing. In October 2003, a community forum attracted nearly 400 citizens who wanted to discuss plans and express priorities for the park. Recently, Congressman Jerrold Nadler included a \$5 million request for funds for the High Line in the Federal Transportation Bill, still to be approved by the Senate.

Additional information on this project can be found at www.thehighline.org.

Mary Habstritt



Tracks entering the Morgan Parcel Post Office, which had its own spur bringing trains directly into the building at the second floor level. (The openings are now bricked up.)
June 30, 1933.



A portion of the High Line parallel to 12th Ave. This photo was taken near 33rd St. on Dec. 13, 1932.

IA Notes from Catalonia

Catalonia, in the northeast corner of Spain bordering France, offers the industrial archeologist a historical and cultural experience unique in the world. Although part of Spain since the union of the crowns of Aragon and Castile in 1469, Catalonia has preserved its unique language and culture despite many attempts at suppression, the latest under the Franco dictatorship when public use of the Catalan language was forbidden. Today Catalan is alive and vigorous, though by practical necessity most Catalans also speak Spanish. The industrial history of the region goes back many centuries and encompasses textile spinning and weaving, iron forging, milling, mining, shipbuilding, and many other activities.

Our tour arrangements were helped greatly by the *Museu de la Ciència i de la Tècnica de Catalunya* (The Catalan Museum of Science and Technology), which is celebrating its twentieth year in a former textile mill in Terrassa. Along with 19 other installations in various industrial sites (and in various stages of development), this museum network preserves and popularizes the industrial heritage of Catalonia. The idea is to preserve industrial installations in situ instead of collecting and moving artifacts to a central museum. In some cases the in situ museum will provide the nucleus for other tourist or recreational activities and thus aid the economic development of the area. James Douet, a consultant with this museum, was our guide.

Catalonia's industrial development was shaped by many factors, but one of the most important, and interesting, was the lack of fuel. Like most of Spain, Catalonia does not have any important high-grade coal deposits. The deposits in the Pyrenees are lignite, with about one-quarter the energy content of coal. Wood is also scarce and the rivers are not large and have highly seasonal flows. This

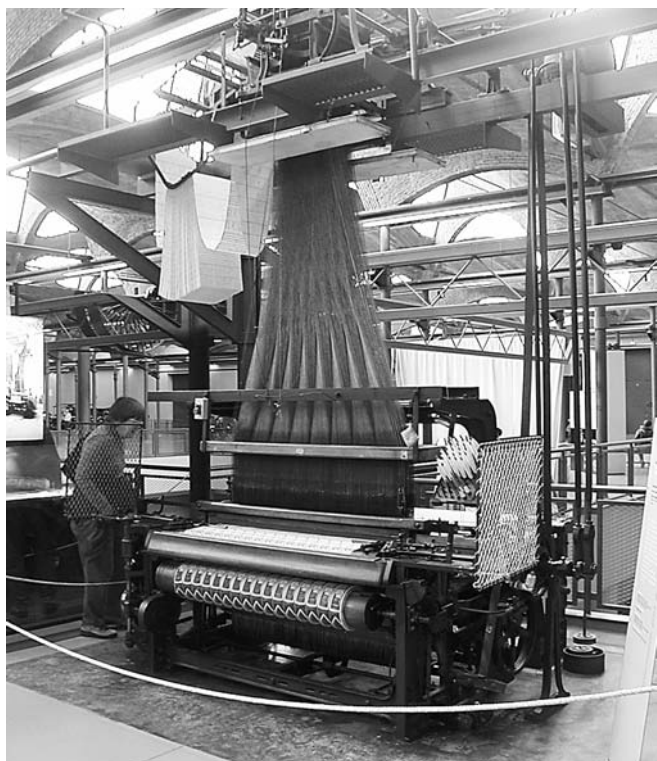
scarcity meant that all possible sources of energy were used and often mills or factories used both water and coal to provide power depending on availability and cost. Rivers were used to their fullest with a mill being established as soon as there was enough fall after the previous one to make it worthwhile. One map shows 43 textile colonies on 70 miles of the Llobregat River alone!

The tour consisted of a central portion spent in and around Barcelona, with two optional extensions: an early-bird tour exploring the Pyrenees and their many pre-industrial sites, and a post-tour exploring Tarragona with its rich Roman and medieval past alongside a modern city and port.

February 25-29—Early-Bird Tour of the Pyrenees

After battling flight delays due to bad weather in northern Europe, the early-bird crew left the Park Hotel, bound for Vic, an old city north of Barcelona on a plain surrounded by hills. A winding road with impressive drops on one side led us to the Parador Vic Sau, opened in 1962 and providing a magnificent view over the Sau reservoir. The *paradores* are hotels started by the Spanish government in the 1920s to make use of castles, monasteries, churches, and other historic and interesting buildings that were not being used and were in danger of being lost. Here we were introduced to late Spanish mealtimes, with supper at 9 pm. Throughout the tour we enjoyed many Catalan specialties, washed down with an abundance of wine.

Thursday morning we woke to six inches of snow. Most of us had not come to Spain for this! The snow had closed the winding road to the hotel as well as the site we were to visit in the morning. So we spent an unscheduled quiet morning eating a leisurely breakfast, reading, exploring the hotel, having snowball fights, or trying to walk to a nearby 12th-century monastery (the going was rough and snowy).



One of several narrow-fabric looms at the Technical Museum in Terrassa.



The forge hammer at the Farga Palau in Ripoll.

James & Diana Bouchard, all photos

After a three-course lunch, things had cleared enough so that we could go down in the bus to Vic. The main square is surrounded by stone and brick buildings, some over 500 years old, and still is used for the weekly market. We visited the cathedral, built at the end of the 18th century. The wall paintings in black and white were done in the 1930s, damaged during the civil war (like so much in Spain), and then redone by the same artist in the 1940s. On the way back, we stopped at the **Costa flourmill** built in 1896 by Enric Sagnier as a sausage factory, which explains the decorative pigs and boars adorning the walls. It was later converted to a roller mill and still is in operation.

Friday we got back on our published schedule by heading to Ripoll to see the **Farga Palau**. We parked the bus on the outskirts of town and headed off to the forge on foot, following a canal built by monks in the 12th century for irrigation and other uses and eventually used for the forge. Along the way James pointed out an 1890s modernist building with the *sgraffiti* decorative technique common in Catalonia. A colored layer of cement plaster is put on first, and then covered with another layer of a different color. The second layer is then scratched or cut into before it hardens to reveal the colored layer underneath, producing a two-tone design.

At the forge, our guides explained the history of iron working in Ripoll from the Middle Ages onwards. The monastery controlled production and quality and leased out the facilities. The forge was used to work iron until the middle of the 19th century when it was converted to copper. It closed in 1975 and has remained untouched since then. The hammers and much of the visible equipment were for copper forging. One common feature of the Catalan forge was the *trompe* used instead of bellows to produce air blast. Water falling down a tube entrained air and caused it to accumulate in a "box of wind," from which it was directed to the forge. Ripoll was known for nails and firearms.

In the afternoon we visited the **Can Bennett cement works** where our guide, a former employee, explained the operations. The limestone quarry is right behind the plant and coal came from about 10 km away. Cement was made in continuous kilns; four small vertical ones built into the hillside and another much larger and more recent horizontal one. In the small kilns, they put down a layer of limestone, then a layer of coal, and continued making layers as the process advanced. Air entered from the bottom and cooled the clinker. The product was natural cement that had enough clay to make it set up as quickly as hydraulic cement. Since they did not have staff to operate around the clock, they banked the kiln at night



Barcelona Station.

with a layer of stone. The larger kiln, with continuous belt feed, replaced the four smaller ones. The works had a small hydroelectric plant and a later steam plant, the excess energy from which was sold. A horizontal water turbine is still operating in the engine house, and a 75 kW Pelton wheel that replaced the steam engine in 1986 is still generating power for the grid. Another engine house contains a Swiss diesel engine driving an AEG (Berlin) generator. This is a classic engine house with large windows, black-and-white tile floor, tool board, and slate switchboard.

Then on to **Besalu** with its early medieval masonry bridge and quaint narrow streets, then to our overnight stop at Banyoles where our hotel overlooked the lake, the site of the 1992 Olympic rowing races and many other aquatic sports. The Benedictines developed this area about the 10th century, building power and irrigation canals called *recs* in Catalan.

The following day we started off visiting the second-oldest **Catalan forge** in Catalonia. It was constructed in 1685 as a copper forge, but there may have been an earlier iron forge. The hammerheads for copper are longer and more pointed than those used for iron, because they are used to make bowls (of various sizes) from the copper disks. The worker keeps the metal moving under the hammer to raise the sides and shape the bowl instead of working the iron to remove slag and compact it. The *trompe* for this

(continued on page 6)

New SIA Events Coordinator

In Sept. 2003, the SIA hired Mary Habstritt as Events Coordinator to oversee arrangements for annual conferences, fall tours, and study tours. This is a new part-time contract position. Volunteers will still be needed to carry out our events, but the organization needed to provide more consistent support and advice to local planning committees by having an experienced organizer available to supervise and assist.

Mary has ample experience. She chaired the volunteer committees for the Duluth (2000) and Brooklyn (2002) conferences. She recently completed a three-year term as Director on the SIA Board and currently is president of the Roebling Chapter. Outside of SIA, Mary is a retired librarian and is on the board of the Prisoners' Reading Encouragement Project. She is studying horticulture at the Brooklyn Botanic Garden and is an active volunteer with the Central Park Conservancy.

She lives in Manhattan with her husband, Gerry Weinstein [SIA], and their five cats.

The SIA's conferences and tours schedule is planned well into the future, thanks in large part to Mary's work. In addition to this year's Wilmington, DE, fall tour, the 2005 annual meeting is set for Milwaukee and the 2005 fall tour for Detroit. In 2006 the annual meeting will be in St. Louis; and the 2006 fall tour still is tentative, with members in Oakland, CA, and northern Arizona developing proposals. We have had several interesting suggestions for international study tours, with South Africa, Cuba, and France being considered. As always, updated information will be published in the *SIAN* and on the Web site.

Contact Mary at events@siahq.org with questions, problems, comments, ideas, or proposals.



The full-size reproduction of a Spanish flagship at the Maritime Museum and Royal Shipyards in Barcelona.

forge is still there as are parts of three water wheels and two hammers. After the copper forge closed, the site was used to make paper and finally even to raise chickens.

February 2-March 6— Barcelona, Manresa, and Terrasa

The first day was taken up with a tour by foot and Metro (subway) of old and medieval Barcelona. It was only a short walk to the Rambla, a large avenue that originally followed a streambed. Our first museum stop was the **Drassanes or Maritime Museum and Royal Shipyards**, parts of which date back to the 13th century when Barcelona was a maritime power. The buildings are stone with arches that run both ways, forming an egg-crate pattern. One of the more impressive exhibits is the full-size reconstruction of a galley in the building where the original was built, complete with a film (presumably from a movie) of how the rowers worked the oars.

Just before lunch, we visited the **Matadero**, a 1908 modernist slaughterhouse with an exceptional entrance gate. One of the buildings is being restored and converted to a library for the technical college next to it. We got a construction-site tour. The local media showed up and interviewed SIA President Vance Packard.

Lunch was in the **Technical Museum**, located in a former water-filtration reservoir. There are three bays, each of which contained a one-meter-thick sand filter bed. Water is supplied to the reservoir by a canal, built in the 13th century and quite an achievement considering that it drops only 10 m in 27 km. After a nice lunch of *tapas* and *cava* (Spanish sparkling wine), we were ushered into a back room to see a collection of textile equipment, mostly wooden narrow-fabric looms, including one capable of making 20 ribbons at once.



Spanish media interview SIA president Vance Packard outside the gates of the Matadero slaughterhouse.

Back to Barcelona for a visit to **Parc Güell**, a great gift to the people by the city's most famous architect, Antoni Gaudí. The industrialist Eusebi Güell was Gaudí's patron and Gaudí expressed his gratitude by naming several of his creations after him. This park was an unfettered expression of Gaudí's love of curving forms, organic metaphors, and *trincadis* (glass mosaic) surfaces. We were to see examples of Gaudí's work throughout the tour.

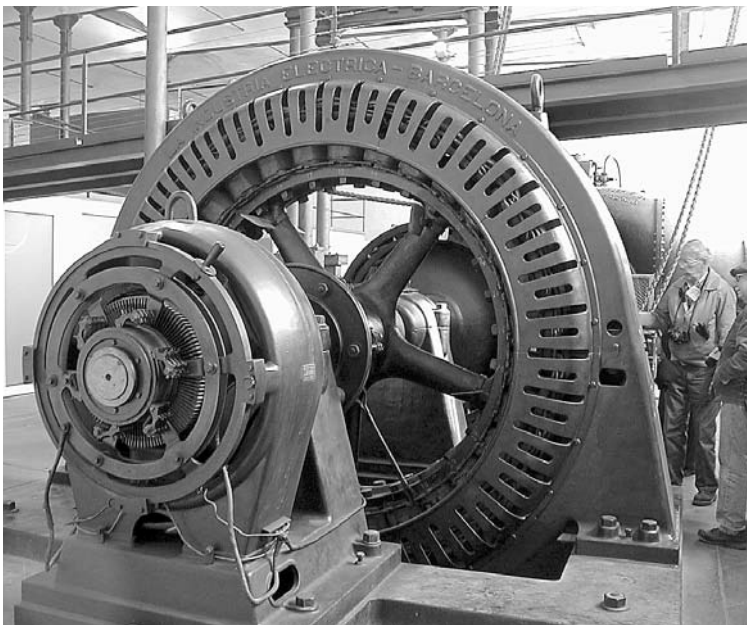
Monday evening we had a private tour and reception in the **Museum of Catalan Culture**, hosted by Eusebi Casanelles, director of the Museu de la Ciència i de la Tècnica de Catalunya and current president of the International Committee for the Conservation of the Industrial Heritage (TICCIH). The museum is located in a riveted steel structure, with brick or tile arches supporting the floors. It used to be a general merchandise warehouse. The excellent hands-on exhibits demonstrate such things as how much a suit of armor weighed and what it took to turn a millstone.

The **St Joan Despi cardboard factory** is amazing and was a great start to the following day. Until recently, waste and recycled materials were used. All the machinery is still intact. It was water powered, originally as a dyeworks, but converted to cardboard in

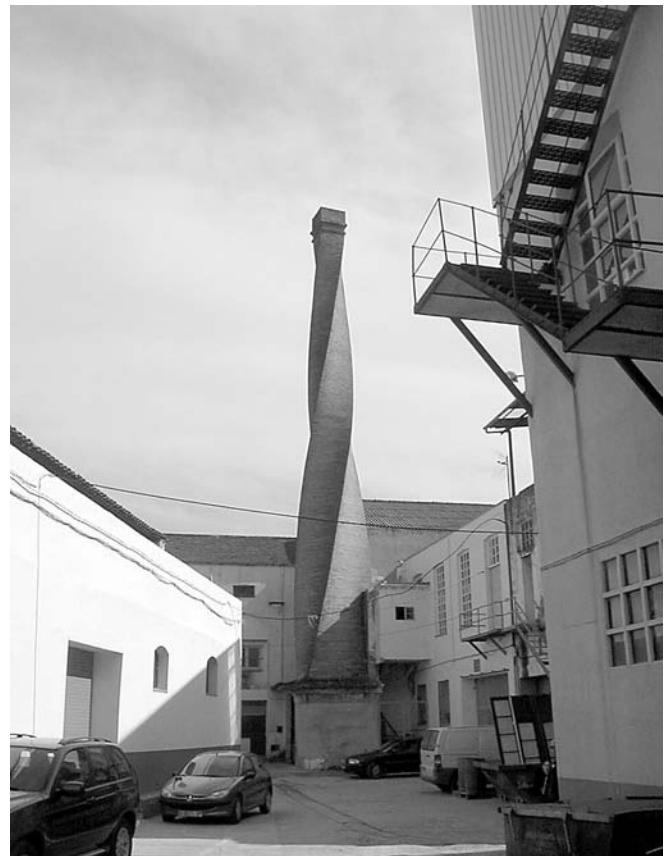
Iron Symposium

October 9-11, Cooperstown, NY

The Farmers' Museum will be host to a three-day event bringing together professionals and enthusiasts to participate in activities related to the production of bloomery iron in pre-industrial periods. There will be exhibits of Viking-age and Spanish-Renaissance iron work, as well as demonstrations of colonial tool making, 19th-century blacksmithing, and charcoal making. On the first day, participants will light a charcoal fire, on the second day they will fire up a smelter, and on the third day they will fashion an artifact from the iron that has been made. Presenters drawn from academia and museums will share their research pertaining to the making and use of early iron throughout the symposium. Registration is \$150, which includes breakfast and lunch each day. One-day registration is also available for \$75. Info: Karen Wyckoff, (607) 547-1410.



The generator (left) and the brick stack (right) at the Colonia Sedo textile mill.



1910. The original waterwheel was replaced by a turbine (still there), then by electric motors. Massive edge-runner mills were used to make pulp, which then passed through vats for thickening, and then on to a multi-section headbox. The card was made in sheets and then dried outside under sheds.

The **Museo Adoberia Cal Granotes tanning museum** also was impressive, with lots of original, maybe last-of-its-kind, equipment for tanning leather. This tannery, like many others in the area, was operated by an extended family (30 people) as a sideline to farming. Only seven hides a year were processed, but the leather was quite expensive so it was pretty lucrative. Young men did the initial, very dirty work in the 18th-century, pre-industrial, processing area in the basement (kept closed to avoid disturbances to the process), allowing the less able ones to do the later work and finishing upstairs.

Museu Molí Paperer de Capellades in an 18th-century paper mill was the first of the industrial museums in Catalonia, started in 1961. It now covers 70 percent of its operating costs by selling hand-made paper. The area had lots of waterpower from a lake and still has a number of modern mills. Since paper is still made here, we saw most of the process demonstrated. It takes 24 hours to beat the rags into pulp and make the paper, and two days to dry the sheets (depending on the weather). About 4,500 sheets are produced a day, employing 20-30 workers who also live in the factory complex.

The **Martorell railway shop** is a modern facility with mostly modern equipment. The planned steam locomotive was out of service so we got a 1929 electric instead for our trip to Monistrol. This is a scheduled run providing nice views of Montserrat and its cog railway across the river valley, plus many mills along the river in a greater or lesser state of abandonment. The monastery and church at Montserrat are a center of Catalan culture and a place of pilgrimage, having been one of the few places able to preserve Catalan language and culture during the Franco years.

In the afternoon we visited our first *colonia*, one of the textile-mill settlements built well outside of Barcelona by owners hoping to insulate their work forces from the chronic labor unrest in the city. **Colonia Sedo** is a huge complex including mills and extensive housing, plus a complex series of canals and tunnels to furnish water power. The hydraulic installation was modified three times and the 1899 equipment (the second installation) is on display.

The **Gaudí Crypt in the Colonia Güell** was under renovation and not at its best, but still impressive. The columns, tilted towards the center of the church, were designed using Gaudí's famous inverted string-and-weight models, accomplishing complex angles long before CAD programs. The Colonia Güell is in much better shape than Colonia Sedo, probably because it is closer to Barcelona and more famous because of the crypt. The buildings are being reused for industrial purposes and the main building renovated for offices.

The **Vilanova I Geltru railway museum** started in the 1960s in a roundhouse for steam engines and has grown since then, aided by its location next to a modern train and bus station. Our visit kicked off with an award-winning 20-minute overview video, financed by the Spanish state railroad (RENFE). The collection

(continued on page 8)



The 18th-century edge-runner mills at the Museu Molí Paperer de Capellades.

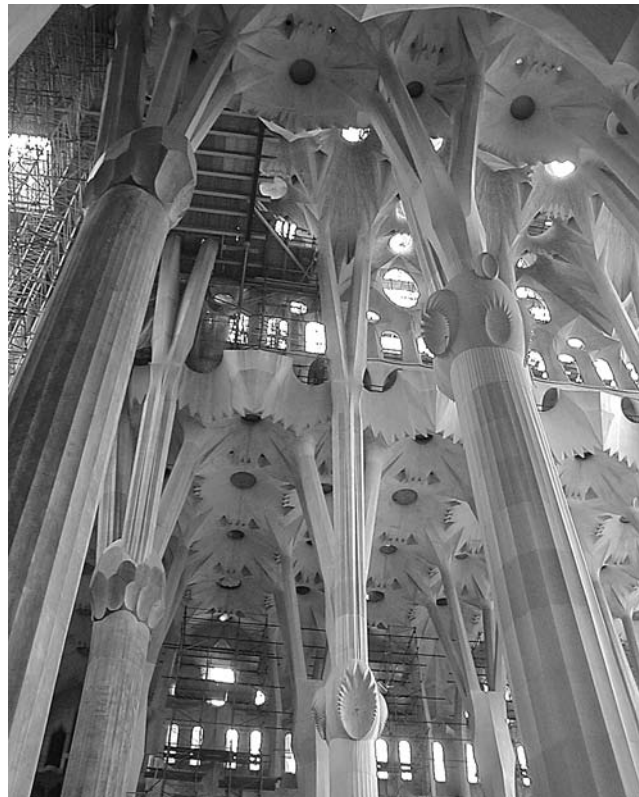
CATALONIA (continued from page 7)

on display consists mostly of locomotives: steam, electric, and diesel. One of the outstanding exhibits is an interlocking machine complete with the light panel indicating switch positions, with part of its covers removed to show the mechanism. The outdoor exhibits include a nice display of track-maintenance equipment.

The impressive **Codorniu Cava Cellars** has an output of 40-million bottles a year, 25 percent of which is exported. Cava is a sparkling wine made by the Champagne method. Here are the largest caves in the world (30 km). The more recent ones are of concrete, but the older ones were dug out of the rock. Only special magnums (10,000 bottles per year) are hand turned now, the rest are done in bulk by shaking the whole pallet of bottles and letting the spent yeast settle. Of course we ended with a tasting and a visit to the shop.

The **Museu de la Ciència i de la Tècnica de Catalunya** is an architectural jewel housed in a former, steam-powered, textile mill (Aymerich, Annat & Jorer) with saw-tooth roof of flat Catalan arches, which when viewed from just the right angle seems to hang in the air and go off into infinity. The museum traces the operations of a woolen mill, from the arrival of coal for the boilers to the finished bolt of cloth in the store. Before and after samples of the material being worked are provided so it's possible really to see what is happening. There is lots of space for temporary exhibits and a goodly amount of hands-on experience for children. Energy is another exhibit theme with representations of every major power-generation technology.

The **Montcada steam pumping station** has undergone only minimal preservation, and much of the brass and other valuable materials have gone missing over time. Restoration of the man-



Sagrada Família church, an unfinished masterpiece of Antoni Gaudí, was one of several of the architect's buildings visited by the Catalonia study tour.



One of the two steam engines at the Montcada pumping station.

ager's house, however, is almost complete, which will allow the site to open to the public. Great use of tile was made everywhere, even in the engine room. There are two steam engines, plus later electric pumps in the wells. Operation ceased about 20 years ago due to water pollution.

The **Sagrada Família church** has been in progress for almost a hundred years. Gaudí had a workroom on-site in his final years, but many of his models were destroyed in the Spanish Civil War. Fortunately, it has been possible to measure the remaining models and work out their geometry using modern CAD software. The other change was to cast intersections and other special shapes in concrete, incorporating the parts into columns, then applying a half-inch of stone cladding over the concrete. Gaudí's approach had been to carve everything out of stone blocks, which took a very long time.

On the last full day of the main tour, we headed north to explore the Pyrenees again. On our way out of Barcelona we stopped in Berga for an interesting arch bridge over the railroad

(continued on page 16)

IA Journal

Tables of Contents Search On-line

The tables of contents of all of the past **IA** journals, the SIA's scholarly publication, have been scanned and can now be searched on-line, providing a handy way to find authors, articles, and book reviews. This feature can be accessed via www.sia-web.org selecting the "IA Journal" from the menu. The tables of contents are in a PDF file that is searchable using the Acrobat Find function.



SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

PUBLICATIONS OF INTEREST

A Supplement to Vol. 33, Nos. 2-3

Spring-Summer 2004

COMPILED BY

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

GENERAL INTEREST

- **Collections: A Journal for Museum and Archives Professionals from the Practical to the Philosophical.** Altimira Pr. (800-272-2223, www.altimirapress.com). Quarterly. \$40/yr. A new multidisciplinary journal for all aspects of handling, preserving, researching, and organizing collections.
- **A Day at the Factory: Stories from Inside British Industry in the 19th Century.** Lindsay Pub. (815-935-5353, www.lindsaybks.com), 2004. 152 pp., illus. \$14.95. Reprints series of articles that first appeared in the *Penny Magazine* in 1844. Firsthand, "a day at" accounts of various factories including the Butterly Ironworks, Fitzalan Steel & File-works, Sheffield Cutlery, Felling Chemical, Barrowfield Dye, Cookson Glassworks, Gallowgate Leadworks, Sopwith's Cabinet Factory, Stephenson's Locomotive Factory, Walker Oil Mill, Northshields Starch Factory, and Elkington's Electro-plate Factory. Excellent descriptions, illustrated with woodcuts.
- Dean Herrin [SIA]. **America Transformed: Engineering and Technology in the Nineteenth Century, Selections from the Historic American Engineering Record.** ASCE Pr., 2003. 204 pp., illus. \$49. Using HAER documentation, illustrates how development and innovation in mining; textile, iron, and steel mills; water treatment, power, and irrigation systems; canals, railroads, and bridges transformed American life.
- Lance Metz, ed. [SIA]. **Canal History and Technology Proceedings, Vol. XXIII.** Canal History & Technology Press (30 Centre Sq., Easton PA 18042; 610-559-6613), 2004. 264 pp., illus. \$24.50 ppd. Includes, Robert J. Kapsch [SIA], *Conewago Canal: First Canal of Pennsylvania*; Michael Knies, *The Pennsylvania Coal Co.: New Insights from the James Archbald Paper, 1852-53*; "We Are Now at War."; Harley Collins, *Hydroelectricity in Monroe & Northampton Counties of Pennsylvania*; Terry K. Woods, *The Western Division of the Sandy & Beaver Canal*; John Thompson, *Addressing the Elemental Challenges to Navigation on Ohio's Towpath Canals*; Charles D. and Beulah M. Wrege, *Searching for the Insignificant: 38 Years of Successful Historical Research in Bethlehem, PA, and Elsewhere, 1957-1995*; John Weinhold, *Pennsylvania's Early Transportation Infrastructure and Some of the Efforts to Improve It; Part I—Prior to 1824*; Dan Bonenberg [SIA], *Visualizing the B&O RR Main Stem*.
- John E. Vacha. **The Harmonious Blacksmith of Chagrin Falls.** *Timeline*, v. 21,1 (Jan.-Feb. 2004), pp. 2-17. Avail: Ohio Historical Society, 1982 Velma Ave., Columbus, OH 43211. \$30/yr.; \$8 ppd./issue. Story of an eccentric and artistically talented blacksmith who had an art studio above his shop and opened a museum, ca. 1870-90.

- K. Aslihan Yener. **The Domestication of Metals: The Rise of Complex Metal Industries in Anatolia.** (Brill, 2000) 210 pp., bibliog., index. Development of metallurgy in Anatolia by examining mining, smelting, and smithing processes, and the social, economic, and political environments in which they occurred.

BRIDGES

- Christopher Gray. **Spanning the East River, With a Sense of Drama.** *NY Times* (Nov. 24, 2002), Real Estate, pp. 7. Anecdotal history of the Queensboro Bridge, originally known as Blackwell's Island Bridge, which opened in 1909.
- William D. Middleton [SIA]. **Colossus on the Ohio.** *Timeline* (Nov./Dec. 2003), pp. 32-37. The great Sciotoville Bridge of the C&O RR, built in 1917. Designed by Gustav Lindenthal, remains the largest riveted-truss bridge in the U.S. Avail: OH Historical Society, 1982 Velma Ave., Columbus, OH 43211, \$8 ppd.
- Paul Parrott. **Chasing Covered Bridges and How to Find Them.** Turner Pub. (www.turnerpublishing.com), 2004. illus. \$34.95. Author has photographed more than 800 covered bridges in 30 states. Coffee-table style book with more than 260 color photos and the location of each bridge.
- Frederic D. Schwarz. **A Span Across Time.** *I&T* (Summer 2004), pp. 8-9. Replacing a reinforced-concrete, thru-arch bridge, built in 1926, with a replica in Sheyenne, ND. Brief history of Marsh arches and the difficulty of preserving them. James B. Marsh patented the design in 1911.
- David Simmons [SIA]. **Unhappy Nuptials.** *Timeline*, v. 21,3 (May-June 2004), pp. 48-53. Avail: OH Historical Society, 1982 Velma Ave., Columbus, OH 43211. \$30/yr.; \$8 ppd./issue. Story of the collapse of a small metal bridge in Shelby, OH, in 1898. Fourth of July celebrations included a public wedding, held on a platform built atop the bridge. Weight of wedding party and crowd contributed to the bridge's collapse, resulting in several deaths and many injuries.
- Thomas R. Winpenny. **Manhattan Bridge: The Troubled Story of a New York Monument.** Canal History & Technology Press (610-559-6613), 2003. photos. \$19.95. The saga of politics and engineering surrounding one of the most important bridges of the early 20th c. Foreword by Eric DeLony and photos by Tom Flagg [both SIA].

MACHINE TOOLS

- **Old-Time Secrets of Making Permanent Magnets.** Lindsay Pub. (815-935-5353, www.lindsaybks.com), 2004. 120 pp., illus. \$9.95. Collection of articles reprinted from various

sources (ca. 1860-1920) explores the early theory of magnetism, the manufacture of permanent magnets from carbon steel, the recharging of magnets, and the mass-production of magnets by the Remy company.

- Oscar E. Perrigo. **Change Gear Devices: Showing the Development of the Screw Cutting Lathe and the Methods of Obtaining Various Pitches of Threads.** Lindsay Pub. (815-935-5353, www.lindsaybks.com), 2004. 81 pp., illus. \$8.95. Reprint of 1903 edition. Perrigo examined 164 patents pertaining to change gears issued since 1854. Said all but 29 were impractical, and then went on to examine and illustrate the most useful, including those by Sellers, Humphreys, Bley, Miles, Riley, and Norton.

RAILROADS

- Alan R. Clarke [SIA]. **West Virginia Central & Pittsburgh Railway: A Western Maryland Predecessor.** TLC Publishing, 2003. 176 pp. \$31. The second of Clarke's books dealing with the railroads of Henry Gassaway Davis. Started in 1880 as a narrow-gauge road, it was changed to standard gauge in 1881. It reached the coalfield at Elk Garden, WV, in Oct. 1881. Eventually, the road ran from Cumberland, MD, to Elkins, WV, with branches to Durbin, Huttonsville, and Belington. It became an important coal carrier and developed an extensive timber country. The line was sold in 1902 and was absorbed by the Western Maryland in 1905.
- Peter Derrick. **Tunneling to the Future: The Story of the Great Subway Expansion that Saved New York.** (NY Univ. Pr., 2001), 422 pp. \$34.95. Reformers hoped to relieve crowding in slums by extending the subway into undeveloped areas of the Bronx, Brooklyn, and Queens. Includes a detailed account of the politics involved in the Dual System contract of 1913. Rev.: *NY History* (Winter 2002), pp. 119-121.
- **The East Broad Top: A Living Landmark** is a DVD of the history and present condition of the Pennsylvania narrow-gauge, coal-hauling railroad, using historic photos and film of EBT equipment, right-of-way, and operations, combined with present-day tourist service. Produced by the Friends of the EBT. 53 min. \$29.95. Avail: Friends of the EBT Company Store, 211 Hampton Rd., Hatboro, PA 19040; FEBTstore@aol.com. **Timber Transfer** is the illustrated magazine of the Friends of the EBT. In addition to news about preservation and operation of the shops, depot, and excursion line, v. 19,3 (Winter 2003) includes Bill Drummond, *Tales of a Traveling Salesman: Selling Rockhill Coal* (first-hand account of selling coal in PA); Ronald Pearson, *Deep Coal Mines on the East Broad Top: Coal Mine Engineering of the Late 1800s* (includes diagrams of stationary hoisting engines and typical slope mine); v. 19,4 (Spring 2003) includes Ron Pearson, *Deep Coal Mines on the East Broad Top: Tail-rope Haulage System for Rockhill #5* (system of hauling cars in and out of the mine necessary because of the fractured rise and fall of the seam). All back issues of *Timber Transfer* (1983-2003) are available for \$4.25 each from the EBT store.
- Thomas Flagg [SIA] and Vincent Lee. **Erie's 28th Street Station, New York.** *Transfer* No. 39 (Sept.-Dec. 2003), pp. 13-21, 32. Historical evolution of this landlocked railroad yard in Manhattan. 23 illus.
- George L. Fowler. **Locomotive Breakdowns: Emergencies & Their Remedies.** Lindsay Pub. (815-935-5353, www.lindsaybks.com), 2004. 244 pp., illus. \$14.95. Reprint of 1903 treatise that deals with "every kind of an accident which is likely to occur to a locomotive while in service." Illustrates practical

tools and appliances for making repairs during a road emergency. Originally intended as examination questions and answers for engineers and firemen.

- Greg Molloy, Bart Jennings, and Hank Morris. **The End of Steam on the Cuban Sugar Railways.** *NRB* v. 68,4 (2003), pp. 4-67. Photos, maps. Extensive coverage and history of Cuba's remaining steam railways and operating sugar mills. Descriptions of current operations on each of the lines. The future of the sugar railways and their historic equipment is uncertain because of the collapse of Cuba's sugar industry.
- Richard E. Prince. **Seaboard Air Line Railway: Steam Boats, Locomotives, and History and Atlantic Coast Line Railroad: Steam Locomotives, Ships, and History.** (Bloomington: Indiana Univ. Pr., 2000), 268 pp. each, illus., \$49.95 each. Reprints of 1966 volumes. Covers the predecessor and subsidiary lines that formed each of these transportation companies, which later merged with each other.
- David Weitzman [SIA]. **The John Bull: A British Locomotive Comes to America.** Farrar, Straus and Giroux (www.fsgkids-books.com), 2004. 18 pp., illus. \$16.00. The story of the most influential early locomotive in America, imported from England in 1831. The illustrated book is for children, but will appeal to grownups as well. Includes detailed and labeled cross-sections of the locomotive, illustrations of the tools and machines used to fabricate it in England, and the locomotive's journey from England to the Camden & Amboy RR (NJ), and finally to the Smithsonian Institution. A fine addition to Weitzman's other books, including those on threshing, railroads, the Model T, airplanes, subways, canals, windmills, and bridges.

WATER TRANSPORT

- James Barron. **Unlocking the Way West, Shovel by Shovel.** *NY Times*, Nov. 25, 2002, Metro section, pp. B1, B5. Archeological search for remnants of lock no. 53 on the Erie Canal in Albany.
- Clarence "Buddy" Bathgate. **The B&O Seizes an Opportunity—In the Short Term, Curtis Bay Ore Pier Made Sense.** *The Sentinel*, v. 26, no. 1 (1st Qtr. 2004), cover and pp. 3-16. Construction and operation of Baltimore ore pier. 17 photos and numerous diagrams.

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With Thanks.

- Cece Saunders and Lara Payne. **Cornfield Point Light Vessel LV-51.** Avail: CT State Historic Preservation Office, 59 S. Prospect St., Hartford, CT 06106; (860) 566-3005. Report on the underwater state archeological preserve near Cornfield Point, Old Saybrook. LV-51 was launched in 1890 and sunk in 1919 when rammed by a boat.
- Charles W. Ebeling. **"The Hell I Can't," The Boats That Made the Landing Possible, and the Man Behind Them.** *I&T* (Summer 2004), pp. 22-35. Andrew Jackson Higgins, inventor and manufacturer of the landing craft that secured beachheads all through WWII. Also, Nick Arvin, **A Harbor Built from Scratch**, pp. 26-33. The temporary port built at Omaha Beach for the D-Day landing took a year to plan and 22,000 men to build, but lasted for three days.
- Thomas Flagg, David Sharps, and David Pearce [all SIA]. **Lehigh Valley Barge No. 79.** *Transfer* No. 39 (Sept.-Dec. 2003), pp. 5-12. History and recent restoration of covered wooden railroad barges. Photos from the restoration shipyard and scale drawings.
- William H. Flayhart. **Perils of the Atlantic: Steamship Disasters, 1850 to the Present.** (Norton, 2003), 288 pp. Begins with the sinking of the Collins Line's *Arctic* in 1854, in which 258 lives were lost, and ends with the 2000 loss of the obsolete *Seabreeze* on its way to being scrapped. In between, every possible way a ship can sink.
- Stephen Fox. **Transatlantic: Samuel Cunard, Isambard Brunel, and the Great Atlantic Steamships.** (HarperCollins, 2003), 493 pp., illus. \$29.95. Portrays the engineering of steamships as romantic, even swashbuckling, as the great lines rivaled each other for ever faster crossing of the Atlantic. There is also plenty here for the disaster fan. Rev.: *NY Times Book Review*, Sept. 14, 2003, p. 18.
- Maria Newman. **Can the Big Guns Draw Big Numbers?** *NY Times* (Feb. 12, 2004). The battleship *New Jersey*, now docked at Camden as a floating museum, struggles to attract visitors and make ends meet.
- Richard G. Schaefer. **His Beloved Aunt Polly.** Avail: CT State Historic Preservation Office, 59 S. Prospect St., Hartford, CT 06106; (860) 566-3005. Report on state archeological preserve of the shipwreck of the *Aunt Polly* on the Connecticut River at East Haddam. The luxurious houseboat burned in 1919. It was owned by actor William Gillette and sank near his estate, now Gillette's Castle State Park.
- LeRoy C. Wilcox and Leonard S. Buscemi, Sr. **Life Along the Lehigh.** Canal History & Technology Pr. (610-559-6633), 2003. illus. Chronicle of human habitation along the banks of Pennsylvania's Lehigh R. from pre-colonial to modern times.

AUTOMOBILES & HIGHWAYS

- David Andrews, photographs by Jet Lowe [SIA]. **Altar of Industry: River Rouge, Henry Ford's Factory of the Future.** *Common Ground*, Spring 2004 (National Park Service, National Center for Cultural Resources, 1849 C St., NW (2251), Washington, DC 20240). Text summarizes the innovative developments that revolutionized the assembly line process but also took their toll on workers. Photo captions include commentary by Lowe on his techniques and approach to industrial photography.
- G. William Beardslee. **New York's Plank Road Boom.** *NY Archives* (Summer 2003), pp. 24-25. Between 1844 and 1855,

over 350 plank roads were built to connect farm communities to canal towns, turnpike intersections, or railroad junctions. Most were abandoned when New York's legendary winters caused the planks to rot in half the projected time.

- Timothy Davis, Todd Croteau, and Christopher Marston [SIA]. **America's National Park Roads and Parkways: Drawings from the Historic American Engineering Record.** Johns Hopkins Univ. Pr., 2004. \$55. Brings together over 300 measured and interpretive drawings that document the characteristics, design strategies, construction practices, and visitor experiences of roads in national parks from Acadia to Zion and parkways from the Blue Ridge to the Natchez Trace. Also includes non-National Park Service parkways including the Bronx River Parkway and Columbia River Highway. HAER has spent more than a dozen years documenting the history of the parkways.
- Dan McCosh. **History Bows at a Ford Plant.** *NY Times* (Apr. 16, 2004). Ford Motor Co. offers a new digital, multi-media show to the public at its renovated Rouge Center in Dearborn, MI, followed by walking tour of the plant.

WATER CONTROL & RECLAMATION

- Clark Hill Dam. The *Augusta (GA) Chronicle* (www.augustachronicle.com) ran a series of articles Apr. 17-24 celebrating the 50th anniversary of the dam built by the Corps of Engineers on the Savannah R. The dam's history, flooding before the dam, rural electrification, and recent efforts by the Corps to recognize the dam's history with oral interviews of local residents who helped build it or who were displaced by it. Clark Hill, renamed Thurmond Dam several years ago, is a multipurpose facility for controlling floods, generating power, and recreation. Detailed descriptions of the powerhouse and project to replace the original seven turbines with more efficient turbines that also oxygenate the water to improve fish habitat.
- Rachel Dornhelm. **Beach Master.** *I&T* (Summer 2004), pp. 42-48. Coney Island, known for its amusement parks, was also the first artificial beach created by dredging sand from the nearby ocean floor. Philip Farley, a Brooklyn engineer, led the effort and came up with the system of groins in the early 1920s.
- Clifford Zink. **The Hackensack Water Works.** Water Works Conservancy (Box 714, Oradell, NJ 07649; www.hwwc.org). 265 pp., illus. \$35.95 ppd. The first half of the book is the story through documents, letters, and archives of the site from 1882 to WWII. The second half tells the story from WWII to present through oral histories of the people who managed and operated the site's pumping station and filtration plant, monitored the quality of the water, or lived and grew up around the site (*SIAN*, Fall 1996). The book won the 2004 NJ Historic Preservation Award and 2004 Bergen County Historic Preservation Award.

AGRICULTURE & FOOD PROCESSING

- Judith A. Carney. **Black Rice: The African Origins of Rice Cultivation in the Americas.** (Harvard Univ. Pr., 2001) 240 pp. \$37.50. African slaves brought technology and processing skills for rice cultivation to the coastal swamps of SC. The systems of embankments, sluices, and canals in inland swamps were almost identical to patterns of West African mangrove rice production and the floodgates, canals, and ditches employed in the tidal flood plains represented a "huge hydraulic machine." Rev.: *NY Times Book Review*, Apr. 22, 2001, pp. 31-33.

- T. A. Heppenheimer. **The Machine That Killed King Cotton.** *I&T* (Summer 2004), pp. 36-41. The role of cotton-picking machines in ending sharecropping and tenant farming from the 1920s to 1960s.
- Curt Wohleber. **The Shopping Cart.** *I&T* (Summer 2004), pp. 10-11. Brief history of the invention and manufacture of the ubiquitous shopping cart. Nesting, the key innovation, came in 1947.
- Jon Gertner. **The History of American Capitalism in a Single Industrial Complex: From the Assabet Mills to Monster.com with a Century and a Half of Boom-and-Bust Cycles in Between.** *NY Times Magazine* (June 8, 2003), pp. 46-50. Traces the 150-year life of 1.1 million square-ft. Assabet Mills complex in Maynard, MA, from the manufacture of textiles to re-use as a dot.com center.
- Richard A. Greenwald. **"The Burning Building at 23 Washington Place": The Triangle Fire, Workers and Reformers in Progressive Era New York.** *NY History* (Winter 2002), pp. 55-91. Examines influences of class and gender on the movement to reform building and labor codes in response to the Triangle Factory Fire of 1911, which killed 146 young immigrant women. Also, David Van Drehle. **Triangle: The Fire that Changed America.** (Atlantic Monthly Pr., 2003), 340 pp., illus. \$25. Portrait not just of the catastrophe but of the social, economic, and political environment in which it took place. Rev.: *NY Times Book Review*, Sept. 7, 2003, p. 16.
- Stephen Petrus. **From Gritty to Chic: The Transformation of New York City's SoHo, 1962-1976.** *NY History* (Winter 2003), pp. 50-87. Traces the de-industrialization and gentrification of SoHo with emphasis on the efforts of artists in transforming the neighborhood of manufacturing lofts into one of the trendiest residential and shopping areas. It was the first commercial area in the city to be designated a landmark district, with much credit going to Margot Gayle [SIA] and the Friends of Cast-Iron Architecture.
- Bill Torpy. **Tybee Lighthouse Shines Up.** *Atlanta Journal-Constitution* (Mar. 10, 2004). Recent efforts to maintain and successfully preserve the GA lighthouse, built in 1867 (tour site—1999 Annual Conference, Savannah).

MINES & MINING

- Peter Dunn. **Mine Hill in Franklin and Sterling Hill in Ogdensburg, Sussex County, New Jersey: Mining History 1765-1900.** 7 vols. 1102 pp., index. Avail: Sterling Hill Mining Museum (30 Plant St., Ogdensburg, NJ 07439; 973-209-7212) or Franklin Mineral Museum (Box 54, Franklin, NJ 07416; 973-827-3481). Describes in detail the mining history of iron (1765-1882) and then principally zinc (1833-1900) at twin mineral deposits in northern New Jersey. The iron part of the story details the context for it in the colonial period and during the Revolutionary War, the role of the ironmaster, the iron-centered village, and their interactions, together with the decline of the eastern iron industry as the Midwest deposits were opened, and then the emergence of steel. This was followed by an extraordinary period of zinc mining. The zinc deposits were so valuable that control was intensely contested, on the land and under it. The principal characters include many famous men of industry, science, and politics, and some real scoundrels and rogues. The mining companies are discussed, together with the growth and emergence of the American zinc industry, the birth of the zinc-paint industry, exports to Europe, the Civil War, the eastern Pennsylvania zinc interests, 40 years of litigation leading to new mining law which was then carried to the West, the creation of Palmerton, PA, a brand-new smelter town, and much more. The comprehensive index is 75 pages.
- Gillian Klucas. **High Stakes Game in Colorado.** *Preservation* (Sept./Oct. 2003), pp. 46-51. Compares the differing impacts of casinos on the former mining towns of Cripple Creek, Black Hawk, and Central City. Although tourist dollars were intended to preserve historic buildings, many developers manipulated the law.

BUILDINGS & STRUCTURES

- Stefano S. Coledan. **On Last Legs, Old NASA Tower Gains Supporters.** *NY Times* (Feb. 17, 2004). Controversy surrounding preservation of the remains of the steel tower used to launch the Apollo rocket at Cape Canaveral. Environmental impact of the tower's lead-based coating, asbestos, and other chemical contaminants are at issue.

Publications of Interest—Now Available On-line.

Publications of Interest supplements (1998-2003) have been combined into a single searchable PDF file (1.5 Mb) using the Acrobat Find function. Members with a high-speed link can easily download and search the supplements all at once. The on-line version of the Publications of Interest is reached via the SIA Newsletter menu option on our home page, www.sia-web.org. Publications of Interest supplements from other years are in the process of being added. Thanks to Don Durfee at SIA HQ for providing this service.

POWER GENERATION

- Strickland Kneass. **Practice & Theory of the Injector.** Lindsay Pub. (815-935-5353; www.lindsaybks.com), 2004. Reprint of 1894 ed. 132 pp., illus. \$10.95. Textbook, amply illustrated with cross-section drawings, describes the evolution, operation, and different types of injectors, an essential device used to inject feed water into steam boilers. Chapters include early history and development of the principle by Henry Giffard in the 1850s, the Sellers injector of 1876, the Monitor injector, the Nathan WF injector, the Schutte, Belfield, Metropolitan, and others.

ABBREVIATIONS:

I&T = American Heritage of Invention & Technology

NRB = National Railway Bulletin, Quarterly of the National Railway Historical Society

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 SIA Newsletter, 305 Rodman Road, Wilmington, DE 19809; phsianews@aol.com.

SIA Education Survey Results

The SIA's education committee received 160 responses to the education survey mailed with membership renewals last winter. Several members used the Web site and replied on-line. The results demonstrated the diversity of our organization with replies falling along professional and aficionado lines.

The overwhelming majority of the respondents, 97%, believe the SIA should have a role in educating its membership/public while 76% stated they would likely attend an education session. Most respondents preferred a single, full-day session held in conjunction with a conference or fall tour while fewer preferred a multi-day, stand-alone course.

The preference for course topics also fell along professional and aficionado lines. A majority of members felt *Industrial History* and *Industrial Processes* would be "very useful" topics. The more professional oriented courses, *Site Safety*, *Preservation Law*, *Mapping/Surveying*, and *Preservation Technology* each had a majority of member responses in the "useful" category. *Continuing Education* and *Hands-on Interactive Programs* both had the most replies in the "no-opinion" category.

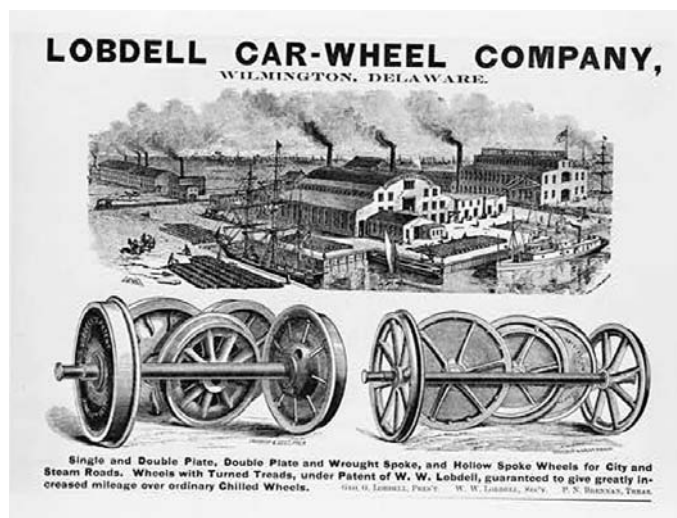
Surprisingly, *Site Safety* had a large number of responses in the "not very useful" and "definitely not useful" categories. *Preservation Law*, *Mapping/Surveying*, and *Continuing Education* had a small, but not insignificant number of responses in the "not very useful" category.

Ninety-five percent of the respondents included their occupation. The majority were Engineers (21), Architects (12), Historians/Architectural Historians/Researchers (11), Teachers (10), Anthropologists/Archeologists (10), Retired Engineers (9), and Professors (8). The remaining were: Students (4), Cultural Resource Managers (4), Computer/Software Programmers (4), Federal/State Employees (3), Railroad Employees (2), Museum Professionals (2), and Bankers/Financial Planners (2). The following registered one each: Retired Machinist, Retired RN, Retired Planner, Retired Professor, Retired Railroad, Retired Librarian, Machine Repair, Book Binder, Mediator, Health Spa, Mathematician, Natural Resource Law Enforcement, Environmental Consultant, Librarian, Industrial Toxicologist, Safety, Geologist, Redeveloper, Manager, Contractor, MD, Electrical Technician, Tour Director.

Thank you to all who responded. These results will be used to develop courses to best serve the membership. If you have questions or comments about the results please contact SIA Director Bode Morin at bodemorin@msn.com or (313) 297-8373.

Wanted: Volunteer Associate Editor

The *SIA Newsletter* is seeking a member to serve as its volunteer associate editor. This individual would work in close cooperation with the editor to seek out and develop one or two, short, feature stories per quarterly issue. The idea is to have an individual responsible for reaching out to our members and working with them to report on current activities and trends in the field of IA. This may mean reporting, for example, on archeological sites, museum exhibits, documentation projects, historic preservation initiatives, education programs, or threats to historic industrial sites or artifacts. If you are interested and would like further information, please contact Patrick Harshbarger, *SIA Newsletter* Editor, 305 Rodman Rd., Wilmington, DE 19809; (302) 764-7464; phsianews@aol.com.



SIA Fall Tour, Wilmington, Delaware, Oct. 13-17.

Registration materials will be sent to members later this summer. Be sure to register early, as space is limited. Wilmington's Lobdell Car Wheel was one of several firms that were important suppliers to the railroads in the 19th c. Today Amtrak's locomotive repairs shops and the Delaware Car Co. carry on Wilmington's railroad heritage. Both are tentatively on our SIA itinerary. Other planned sites include steel, chemicals, flour milling, bridges, and Wilmington's revitalized riverfront with many adaptively re-used industrial buildings. Of course, Hagley and Du Pont's historic gunpowder yards are on the schedule too.

SIA Elections

Suggestions Wanted. The SIA election process has remained unchanged for many years. While there are no particular problems with the current system, the Nominations Committee believes there may be room for improvement. Could we, for example, add or change voting technologies in order to increase participation? Should there be a greater diversity of candidates on the slate, and how could we achieve it? The Nominations Committee seeks comments and suggestions for improvement of the election process, including nominations; ballot production, distribution, and collection; voter participation; and other issues. We also welcome comparisons of our election process to those of other organizations, whether similar or dissimilar to SIA. We will review all input from members, conduct further research where required, and make recommendations to the Board of Directors for possible implementation in a future election cycle. Please send your comments no later than Sept. 15th to Justin M. Spivey, SIA Nominations Committee Chair, c/o Robert Silman Assoc., 88 University Place, New York, NY 10003-4542; spivey@rsapc.com. Comments postmarked after Sept. 15th will be considered at the discretion of the committee.

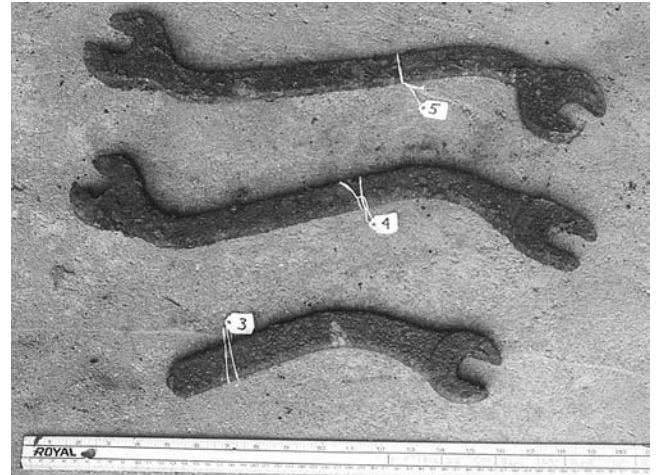
Election Results. At the Annual Business Meeting in Providence, RI (June 12), the following election results were announced: elected to Vice President was Robert Stewart; elected Director were Richard Greenwood and Kenneth McIver; elected to the Nomination Committee was Jet Lowe; and elected TIC-CIH Representative was Patrick Martin. The next issue of *SIAN* will have a full report of the 2004 Annual Conference.

Railroad Roundhouse Archeology in New Haven

In the last four years the Connecticut Dept. of Transportation has undertaken a series of improvements to the rail yard that lies southeast of the New Haven passenger station, including construction of a new storage yard for electric multiple-unit (MU) commuter equipment and an overpass that will allow Church St. to cross over the rail yard to the Long Wharf section of New Haven. In commenting on the project, the State Historic Preservation Officer asked that historic buildings impacted by the project be recorded to HAER standards and that archeological monitoring accompany the construction activities.

The New Haven rail yard dates from 1868, when the New York & New Haven RR acquired 20 acres of marshy land that lay between its tracks and New Haven harbor in order to build a massive new shop facility. Completed in 1870, the complex consumed an estimated 1.5 million bricks and 110,000 sq. ft. of roofing. It included a 260-ft.-long machine shop, a blacksmith shop with 22 forges, a shop for building rolling stock, and a 360-degree roundhouse for engine storage and repair. A short time after its completion, the railroad merged with an adjacent line to become the New York, New Haven & Hartford RR, popularly known as the New Haven, the railroad that dominated rail transportation in southern New England for nearly a century thereafter.

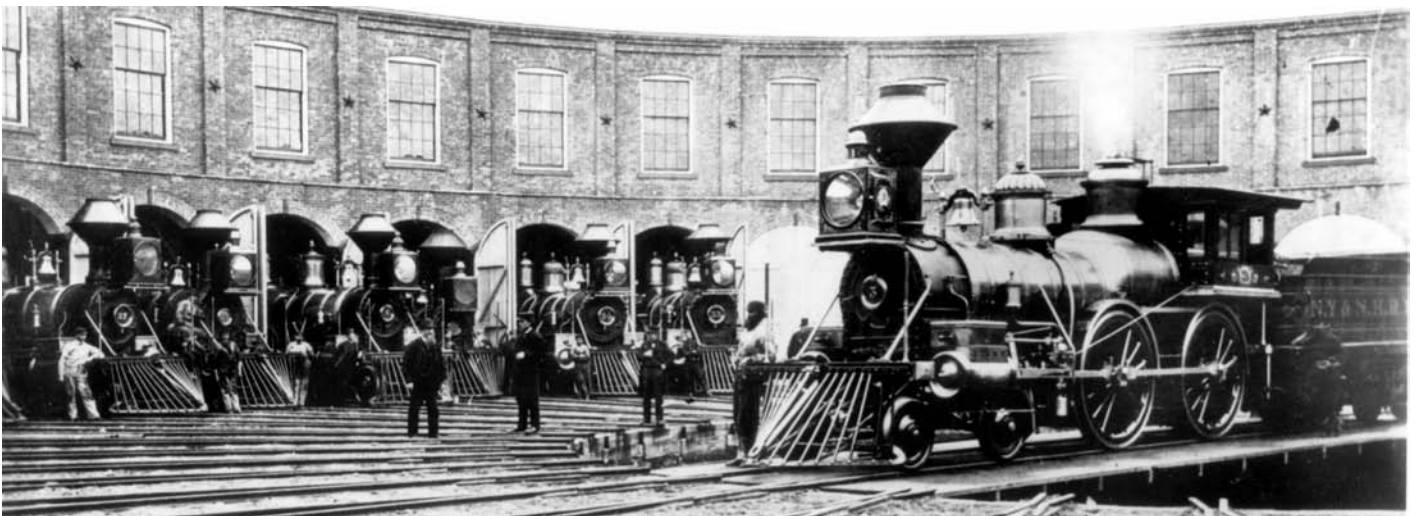
When built, the New Haven complex was the railroad's most important shop facility, and many of its early locomotives and much of its rolling stock were built there. Additional facilities, including two more roundhouses, were added in the 1890s at the south end of the yard, giving the name Lamberton St. Shops to the entire facility. In the 20th century, the yard was eclipsed by larger facilities at Van Nest, NY, Cedar Hill in New Haven, and Readville, just outside Boston. Nevertheless, the yard continued to be important to the railroad. The New Haven's entire wooden boxcar fleet was rebuilt in these shops in the 1920s, along with hundreds of gondolas and flatcars. The yard also served as the maintenance facility for the railroad's 39 gas-mechanical rail cars, an appropriate duty for the 52-foot-diameter turntable dating from 1870. In the early 1960s, the New Haven shops were again called upon for an important contribution, overhauling 11 second-hand EF-4 electric freight engines (known affectionately as "bricks"), thereby addressing a serious motive-power shortage.



Wrenches recovered from fill in roundhouse at Lamberton St. end of yard.

The new Church St. overpass required several piers within the footprint of the original 1870 roundhouse, which had been reduced by half about 1900 and demolished in the late 1930s; moreover, the foundation for the huge crane that will erect the truss over the tracks required excavation in additional parts of the roundhouse site. Public Archaeology Survey Team, Inc. (PAST) was called upon to monitor these activities and devised a preemptive pre-construction strategy to reveal any roundhouse remains. Paving and hard-packed fill were removed in the impact areas. Some had been completely disturbed by later construction, including an early 20th-century storm drain system, but a number of repair pits and the central turntable pit were encountered by the targeted excavation. These features were then exposed by additional machine-aided stripping and hand-cleaning so that they could be photographed, measured, and drawn. During the process, the removal of fill was examined for related cultural material.

As a result, three periods of repair pits were identified. The first generation were shallow pits of stone masonry; a somewhat larger type employed brick walls, while the latest type was built of concrete, with re-used T-rail providing the reinforcement. The



New York & New Haven RR Roundhouse, ca. 1870.

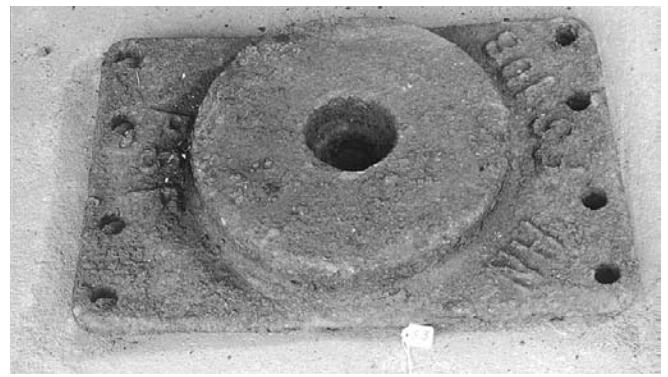
All photos courtesy Bruce Clouette/PAST.

turntable itself rotated on a single-rail circular track laid along the base of a granite retaining wall.

Material recovered in the fill included the usual railroad debris of ties and spikes, but also other items that were clearly architectural and reflected the use of demolition debris (probably from the roundhouse itself) as fill: brick, window glass, skylight glass, granite pintle blocks from the original arched openings, steam piping, and timber framing connections. Some of the track spikes were only 4-inches long, suggesting that they may have been associated with the light rail that was spiked to sleepers atop the repair pit walls. Shaft bearings and a heavy-duty machine base suggested the use of the building for repairs. A small amount of food-related material was encountered, including clamshells and ceramic fragments. More intriguing was a ca.1880 patent-medicine bottle for "Mrs. Winslow's Soothing Syrup," an opiate advertised for teething babies but apparently one that found some use in the rail yard as well.

At the opposite end of the yard, the construction of the MU storage yard impacted the site of two later roundhouses, one built for engine storage and repair, the other for repairing rolling stock. These had also been demolished in the early 20th century when Cedar Hill absorbed their duties, though one 70-ft. turntable remained in use until a loop track was built around 1970. Here, the entire site was to be affected by the drilling of foundations for the electric catenary poles and by the installation of an elaborate drainage system and other utilities. The research design therefore turned to sampling, in which a large pie-shaped section of each of the two roundhouses was exposed from the perimeter wall past the center point of the turntable. These roundhouses, both dating from the 1890s, utilized repair pits with brick walls and floors.

Architectural debris in the fill included brick, glass, slate, and timber-framing fittings. There was also the usual railroad debris of spikes, tie-plates, and ties. What was most interesting, however, was that the repair pits in the west roundhouse, used for the repair and rebuilding of rolling stock, were filled with iron objects related to wooden railroad



Freight-car center plate, marked "NH," recovered from fill in roundhouse at Lamberton St. end of yard.

cars and their repair: tools such as wrenches, reamers, and a paint bucket; car parts such as truck journals, grab irons, stirrup steps, center plates, and king pins; fasteners, including rivets, bolts, and cotter pins; and a sign advising workers not to use welding gases for any purpose other than cutting or welding (!!!).

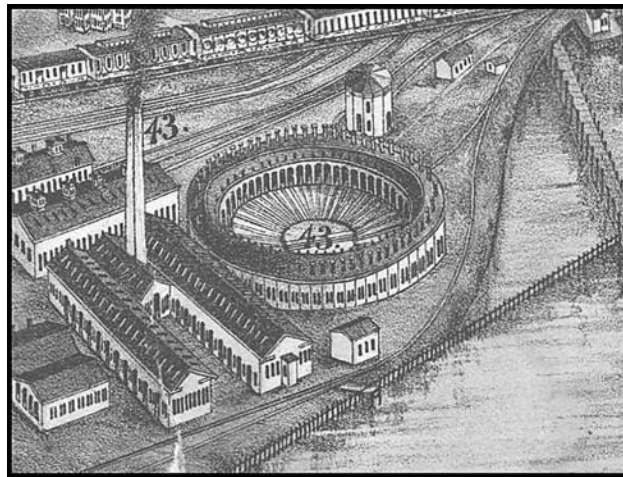
The archeological investigations at the New Haven rail yard shed a great deal of light on this particular facility, for which there is limited graphic evidence. For example, it is evident from the exposed features and the material recovered in the fill that the ca.1900 reduction of the 1870 roundhouse did not entirely replace the original structure but rather was a combination of rebuilding and re-use. It is also apparent that at least in these three cases, the architectural items recovered from the fill exactly match what is

known from other sources as the buildings' materials, and perhaps a similar correspondence could be assumed in cases where there is no graphic or documentary evidence. Finally, a typology of repair-pit construction emerges from these investigations, in which the pits become deeper and longer with time and the material progresses from stone to brick to concrete.

Bruce Clouette



Detail of turntable circumferential bearing rail at base of retaining wall.



Bird's-eye view, 1879, of roundhouse and adjacent repair shops.



Portion of retaining wall for turntable pit, New Haven rail yard roundhouse, 1870. Piers in background are for the Church St. overpass.



Repair pit from 1870 roundhouse, 2½ feet deep, stone side walls, brick floor.

tracks. We then had a 2½-hr. ride up to the **Ashland cement works at Clot del Moro**. The unbelievably remote location was chosen due to the presence of limestone deposits. James Douet worked on the research for the displays and gave us a tour, pointing out his father-in-law's tools that now are a part of the exhibit. The highlight is a 1918 movie showing the works in operation. All equipment and materials had to be transported 30 km by road to the site, hauled by a tractor imported from California. The railroad arrived later to transport the finished product out.

Then back down the valley and up another impossibly winding road to the **Cercs coal mine**. An underground mine tour took us in by train; we then walked back out through exhibits in the adit. When the mine finally closed, they were 900 m down and 20 km away from the hoisting shaft, and it took an hour to reach the face. The coal had low-value (5000 Btu/kg) and cost three times that from South Africa.

Baells hydroelectric dam was built in the early 1970s and provides 5,000 kW normally and 7,000 kW at peak—not a lot but Spain needs all it can get as all other forms of energy must be imported. In 1982, a flood did considerable damage in the region, documented with impressive photos of the dam spilling twice its design volume and rivers roaring through local towns.

March 7-9—Tarragona Post Tour

We had a leisurely late start and enjoyed a nice sunny drive to the **Fassina Aguadents distillery** in Esplug de Francoli. The city is building an interpretative center in front of it so we were essentially visiting a construction site. The product was commercial alcohol made from the must and spent solids from wine making. The input was boiled in a closed vessel under pressure provided by steam pumps and the alcohol then condensed in a still. The spent material was raked out and transferred by auger to a couple of wooden presses to remove liquid, presumably recovered for distillation, then weighed and sold as fertilizer.

A short ride away were the **Espulga co-op wine cellars**, which still have most of their original equipment, though there's been some modernization. Fermentation was done in tiled rectangular vats below the tank level with access ways between them. Traps

allowed the fermentation progress to be checked by lowering a lighted candle through a small hole. If it went out, CO₂ was being given off and fermentation was ongoing; if it stayed lit, then the fermentation was complete. The Catalan vault was used extensively in the construction, even for the supports under the concrete tanks.

Poblet is a world heritage site and the only Cistercian monastery in the world that still has all its dependencies.



The remains of the smelter at the Bellmont lead mine.

Started in 1151, it was an important site by the 14th century. It was extensively damaged and looted in 1865 when the government confiscated most church property, and then abandoned. It has been undergoing restoration for some time and the monks came back in 1950 to start over again.

The next day our first stop was the **Bellmont Priorat lead mine** in the mountains behind Tarragona. The mine is a *colonia*, as the region is remote and the firm had to bring in the miners. Many of the buildings are at least partly there, but all of the equipment was removed after the mine shut in 1972. This was hard-rock mining, so no shoring was needed. At closure, the work was down to 20 levels. As pumping had been required, below level 4 now is flooded as the pumps stopped when the mine closed. None of the smelter remains except for the building wall, flues, and chimney.

The **Pont del Diable Roman aqueduct** was quite impressive and fun to explore. Some repairs have been done over the years to stones damaged by weather or wind erosion, but most look original. The capstones on the channel walls are missing but part of the channel can be seen, on one end, cut into the rock and wandering off into the distance.

Our final day began with a walk down to the modern **Port of Tarragona** for a boat tour, wending our way through multiple railroad crossings and heavy rail traffic. Our guide from the port was very knowledgeable and maintained a steady commentary on what ships were there. The main commodities are soy flour, grain, and coal. The docks are being extended using a floating caisson-maker that makes hollow concrete caissons (as developed for the Normandy invasion) that can be sunk in position to make the dock wall. The port is the fourth largest in Europe and growing. There is a museum in a large former warehouse, including a special area for children. A large rug depicts a map of the port on which children can push around toy boats. Catalan museums seem to devote great attention to making the next generation aware of its history and heritage. The cutaway marine diesel engine was the group favorite. It came out of a ship that was being scrapped and is turned by a small electric motor on request.

The Catalonia study tour left us all with the feeling that we had just scratched the surface of the deep, rich, and varied history (industrial and otherwise) of Catalonia, and experienced a living and vibrant culture that treasures its past and is working hard and devoting many resources to preserving and interpreting it. Special thanks go to our tour guide James Douet and organizer Pat Martin of Michigan Tech.

James and Diana Bouchard



The Pont del Diable Roman aqueduct in Tarragona.

IA EXHIBITS

For Time Out of Mind: Historical Industrial Landscapes in the Slate Vein of New York-Vermont is an exhibition of quarry photographs by Sandy Noyes [SIA] currently at the Slate Valley Museum in Granville, NY. Noyes has been photographing the region's quarries since the 1980s, documenting abandoned technology and the changing quarry landscape. Info: www.slatevalley-museum.org.

The Subway at 100: General William Barclay Parsons and the Birth of the NYC Subway opened at the New York Public Library's Science, Industry and Business Library in Healy Hall in March and will run through the end of the year (188 Madison Ave. near 34th St.). The story is told of Parsons and his determination to build the subway that opened from City Hall to Harlem in 1904, through manuscripts, publications, photos, and subway memorabilia including tokens, standee straps, turnstyles, and transfers. Info: (212) 869-8089. A review of the exhibit appeared in the *NY Times* (Mar. 19, 2004), Sec. B, p. 36.

B&O RR Museum Set to Re-Open Nov. 13-14. In Feb. 2003, a record snowfall caused the roof of the Baltimore museum's National Historic Landmark 1884 roundhouse to collapse, causing severe damage to not only the building but the priceless collections within (*SIAN Spring 2003*). Many wondered if the museum could ever recover. The museum now reports that the outpouring of support has been remarkable, even overwhelming, and donations continue to arrive from every corner of the globe. The museum has announced it will hold a grand re-opening with new exhibits, activities, programs, and visitors facilities, only 21 months following the tragedy. The roundhouse is being reconstructed with some structural members replaced with modern materials to improve stability. Two large outdoor exhibition platforms have been built to provide better accessibility to the collections. Info: www.borail.org. ■

IA ON THE WEB

Baltimore Transit Co. (www.btco.net) features historic photos and facts on the city's streetcar and bus systems, as well as a section called "B-more Ghosts" that offers up views of factories, monuments, and stations once found along some of the routes.

Belgian Coke Plant (www.carcoke.be). The Flemish Association for Industrial Archaeology is campaigning to preserve the last coke plant in Belgium, Carcoke, situated in Zeebrugge, near the coast. They request information on similar international sites and letters of support.

Industrial Poetry (www.livingforge.com). Two college students from western New York have started a nonprofit company that identifies, collects, and publishes poetry and the literature of rust belt cities.

Knitting Industry (www.knittingtogether.org.uk). Photos, oral history, and virtual museum of the East Midlands (UK) knitting industry from the 16th c. to the present.

HISTORIC BRIDGE NEWS

The **Newfield (NY) bowstring bridge** over an inlet to Cayuga Lake, built ca. 1873 by the King Bridge Co., was re-dedicated on June 5, following rehabilitation of its deck and abutments (see *SIAN Summer 2003*). The small town rallied around this rare historic bridge and was able to raise \$60,000 to complete the work. Good job! An article on this success story appeared in the *NY Times*, June 27.

Real Estate Development May Impinge on the Brooklyn Bridge. A proposal to construct a 178-ft.-tall residential building just 70 ft. from the historic Brooklyn Bridge is moving through the New York City zoning variance process. This proposal has provoked sustained protest from civic groups and individuals who argue that the building would be inappropriate for its site. It will loom 100 ft. above the bridge's pedestrian walkway and impede important view corridors. At risk are incomparable vistas which attract thousands of visitors each year. And, the proposal sets a precedent for further encroachment. Development on the Brooklyn side has heated up over the past five years, with many industrial buildings readapted for luxury residential use. The current proposal calls for demolition and new construction. The immediate area around the site is made up of post-Civil War, three- and four-story industrial brick buildings, including the Empire Stores and other warehouses. The riverside Empire-Fulton Ferry State Park lies directly across the street (tour sites, 2002 Annual Conference—Brooklyn). The zoning variance is the key. In order to educate the politicians and voice your opinion, contact the Brooklyn Borough President, Hon. Marty Markowitz, 209 Joralemon St., Brooklyn, NY, 11201. He will make his recommendation soon. The usually pro-development City Planning Commission must also rule on the appropriateness of the variance application. Your point of view is truly needed and can make a difference! Info: Ann Schoenfeld, aasbrook@aol.com. ■

Photographs of Chinese Industry (www.zhouhai.com). Zhou Hai, a Beijing-based photographer has a Web site of his work called "The Unbearable Heaviness of Industry." Collection consists of atmospheric black-and-white photos of workers, many posed, in industrial workplaces, including steel mills, coal mines, and oil drilling rigs. He stayed a minimum of two weeks in each location to get to know the people and their work. Some of the photos are included in a show, "Documenting China: Contemporary Photography and Social Change," at the Bates College Museum of Art in Lewiston, ME, which opened earlier this year.

Save Our Steel (www.saveoursteel.org) is a grassroots effort dedicated to preserving the closed Bethlehem Steel Works in Bethlehem, PA (tour site - Fall Tour, Lehigh Valley 2002). Links to newspaper letters and articles, and discussion of various plans to re-use the site.

"IA on the Web" is compiled from sites brought to the editor's attention by members, who are encouraged to submit their IA Web finds by e-mail: phsianews@aol.com. ■

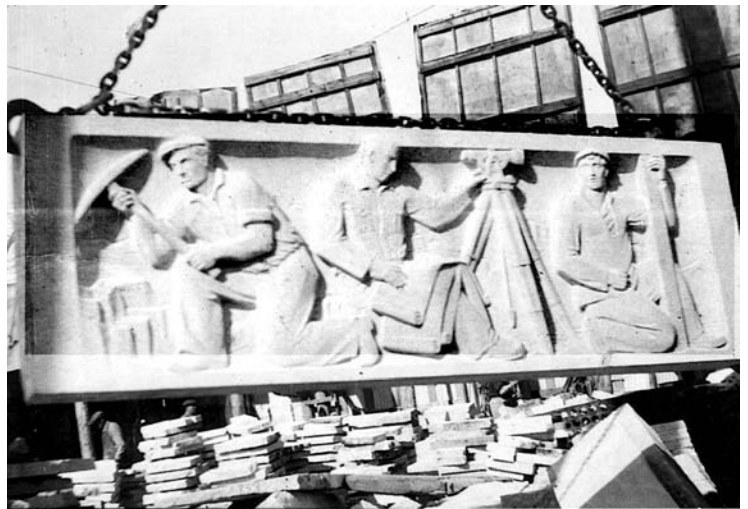
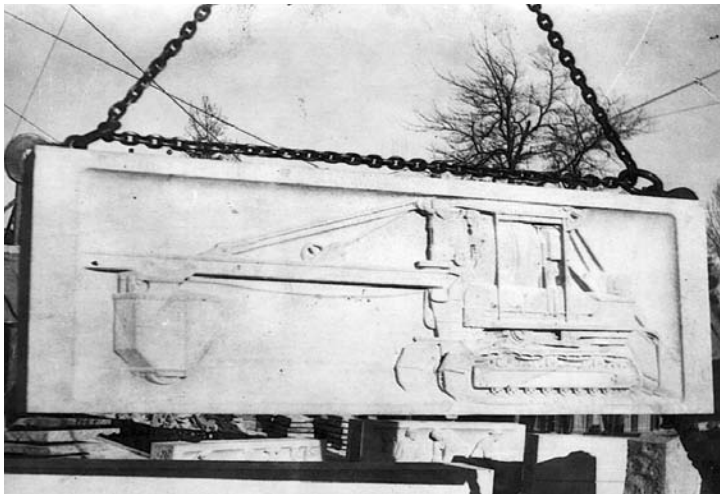
NOTES & QUERIES

Wanted: Record of the Swedish Iron Trade in the U.S. The 6th-generation owners of an old iron works just inland of Gävle, 200 km north of Stockholm, are searching for historical documentation related to shipping activities between the iron works and the U.S. from 1823 to 1860. The family's trading houses owned 39 ships and worked under several names: Elfbrink & Luth; Elfbrink & Norman; and Elfstrand & Co. The Gävle works and most of the original shipping documents in Sweden were destroyed by a fire in 1869. They would like to learn more about the Swedish iron trade in the U.S.; find records of ships arriving in Charleston, Savannah, New Orleans, and New York (they have the names and dates of the ships calling at different ports); and follow the traded goods, primarily iron (who were the buyers, wholesalers, traders, and final customers?). Any exchange of information or leads to sources would be appreciated. Eva and Tage Klingberg, Mackmyra Bruk, 818 32 Valbo, Sweden; fax +46 26 13 20 31; tkg@hig.se

Olympic Games Unfriendly to Historic Industrial Sites. The Greek port city of Piraeus will be one of the centers of activity at this summer's Olympic Games but redeveloping the port has not been without compromise. Perhaps the biggest loser has been the 19th- and 20th-century industrial heritage of the port. The Ministry of Culture, Greek TICCIH, and others have unsuccessfully advocated for adaptive re-use of the port's industrial buildings and structures. The first reinforced-concrete bridge in Greece (1902) and two metal bridges of about the same age have been replaced. The heart of Piraeus's 19th-century industrial zone of small industries and equipment was leveled for a new highway. Redevelopment of waterfront property has also resulted in the loss of the historic Lipasmata fertilizer factory (1909) and the Retsinas textile factory.—*TICCIH Bulletin 24 (Spring 2004).*

Wanted. Historic Construction Materials Consultant with expertise in early 20th century concrete and/or cement to analyze specimens from Campbell's Bridge—a 1906 reinforced concrete arch bridge in eastern Pennsylvania. Of particular interest are physical analysis to determine proportions of the constituents of the concrete, and chemical analysis of the cement to determine type and source. More information on the bridge can be found at www.facstaff.bucknell.edu/sbuonopa/campbells/. Reply to: Stephen Buonopane, Dept. of Civil Engineering, Bucknell Univ., Lewisburg, PA 17837; (570) 577-1685; sbuonopa@bucknell.edu.

Call for Papers. On May 19-21, 2005, the **Business History Conference (BHC)** will hold its annual meeting in Minneapolis at the Univ. of Minnesota. The theme for the conference is Reinvention & Renewal. Throughout history, firms, industries, regions, and nations have demonstrated remarkable capacities to transform prevailing business practices and reorient economic activities. Minnesota's own 3M is just one example of such reinvention, with its reorientation from mining to Post-It notes. On another level, the region surrounding Minneapolis has renewed itself by refocusing from flour and cereal milling to high tech. Longtime residents and immigrant entrepreneurs have also remade numerous neighborhoods in the city into shopping, restaurant, and theater districts. The BHC invites proposals aimed at elucidating all aspects of such phenomena. Potential presenters may submit proposals either for individual papers or for entire panels. Individual paper proposals should include a one-page abstract, the sources on which it is based, and its relationship to existing scholarship. Each panel proposal should include a cover letter stating the rationale for the session, a one-page abstract, and author's vitae for each proposed paper (up to three), and a list of preferred chairs and commentators. The deadline for receipt of all proposals is Oct. 1. Info: Roger Horowitz, BHC, Box 3630, Wilmington, DE 19807; (302) 658-2400; fax 655-3188; rh@udel.edu. ■



Do You Know These Granite Panels? The descendants of two granite workers at the Fletcher Granite Co. in Chelmsford and Westford, MA, are trying to locate 32 handsome architectural friezes depicting the construction trades. Pierre Moreau and Camille Boucher of Roberval, Quebec, made the panels in the late 1920s and early 1930s. The descendants thought the panels had gone to Washington, D.C. to be placed around the perimeter of a building just below the roof line. Many e-mails later they have decided that Washington was not the location. Another lead suggests that New York City may have been the location. Info: Marilyn Day, Westford Historic Society, Box 411, Westford, MA 01886; (978) 692-5550 (M,W,F, 9-1); margreenda@aol.com.

SITES & STRUCTURES

East Broad Top RR (NHL, Orbisonia-Rock Hill, PA) will be operating on Saturdays and Sundays from June 5 to Oct. 31 (see *SIAN*, Spring 1996). EBT locomotive no. 14 (2-8-2) will be in active service. The EBT shops and yard, among the most complete in North America, are little altered from their condition in 1900, and include all of the steam-powered, belt-driven equipment necessary to maintain locomotives and cars, an eight-stall roundhouse, turntable, and station and support buildings. Among the special events planned are the EBT Homecoming Appreciation Day (Aug. 14) with guided walking tours of the shops and yard and the Fall Reunion and Celebration (Oct. 9-10). Info: www.febt.org.

Statue of Liberty Re-opens. Closed since Sept. 11, 2001, the statue will re-open for limited visitation later this summer. Under a new security plan, visitors will be able to tour the Statue of Liberty museum and enjoy the view from the deck at the top of the pedestal. Near the base of the statue, visitors will have a newly created opportunity to see up into the metal framework through a glass ceiling. Over the past two years, the National Park Service (NPS) has invested \$19.6 million in security enhancements for the statue. Plans anticipate \$9 million in additional spending this year. Info: www.doi.gov/news/040330a.htm. Large-format photographs taken in 1985 by NPS Historic American Engineering Record (HAER) photographer Jet Lowe [SIA] are featured on the USA Today Web site as part of the paper's coverage of the re-opening announcement, www.usatoday.com/travel/news/2004-03-30-statue-of-liberty-x.htm.—NPS Heritage News, April 2004.

John J. Harvey Receives Historic Preservation Grant. The 1931 NYC fireboat, *John J. Harvey*, has received a \$320,000 matching grant from the State of New York for ongoing restoration. The fireboat, which put on a display for SIA members at the 2002 Annual Conference (Brooklyn) and has been host to many a Roebling Chapter special event, will be able to continue to operate for decades to come as a result of the grant. If you would like to contribute to the matching funds, your tax-deductible donation may be sent to the nonprofit Save Our Ships New York, Pier 63, North River, New York, NY 10011. Info: www.sosny.org.

Milford Powerhouse Update. The Milford, Michigan powerhouse, built by Henry Ford in 1939 (see *SIAN*, Spring 2002), will be restored beginning this summer. The hydroelectric station, a relatively small Art Deco gem designed by Albert Kahn, originally supplied power to Ford's carburetor plant at Milford. The plant was one of Ford's model "village industries," intended to showcase the compatibility of rural life and industrial development. In Dec. 1999, the Milford Village Council put out a call to save the building, which had been abandoned for many years. It has drawn the attention of numerous contributors, but the final piece fell into place last year as the Michigan Department of Transportation awarded a \$262,500 grant and approved exterior restoration plans. Info: www.umd.umich.edu/dept/acad/cas/casah/casahsite/milfordmill.html.

The **Pabst Brewing Co. Complex** in Milwaukee was listed on the National Register of Historic Places in Dec. 2003. Founded in 1844 by Jacob Best, Sr., under the leadership of Capt. Frederick Pabst, the company became America's largest national brewery in 1874. The first to produce over a million barrels in a single year in 1892, it was the largest brewery in the world. Milwaukee's German immigrant and second-generation population more than doubled during the 1850s, providing both a ready market and a skilled workforce for the 26 lager breweries thriving in the city. The architecturally distinctive brewery complex of more than 20 buildings is built in the German Renaissance Revival style with battlements and crenellated tower. It is no longer operating.—NPS Heritage News (Jan. 2004). ■

CHAPTER NEWS

New England Chapters jointly held the 17th Annual Industrial Archeology Conference in Feb. at Plymouth (NH) State Univ., with papers presented on Merrimack River transportation canals, Maine ferries, Boston's fire-alarm telegraph system, ancient ceramic industries, and underwater archeology.

Oliver Evans (Philadelphia) met at the Fairmount Water Works (tour site—Annual Conference 1991) in May. Lance Metz [SIA] was on hand to present a slide show on the history of the Schuylkill Navigation. In 1815 the Pennsylvania legislature granted a charter to make the Schuylkill River navigable by constructing dams, locks, and canals. Fairmount Dam was the final step in accomplishing this and provided the waterpower for Fairmount Water Works on the east bank. The navigation was important to bringing coal to urban markets. In May, the chapter toured the Univ. of Pennsylvania's MOD VII Plant, a state-of-the-art chilling system that provides climate control to the majority of the campus using 8,200 control points.

Roebling (Greater NY-NJ) organized an architectural walking tour of the College of St. Elizabeth in Morristown, NJ, in Apr. The college was founded in 1899 and is the oldest college for women in New Jersey and one of the first Catholic colleges in the U.S. to award degrees to women.

Samuel Knight (Northern CA) visited Western Dovetail, a 100-year-old joiners shop, at the old Mare Island Naval Station in June. Western Dovetail makes solid-wood dovetailed boxes and drawers using machinery that the Navy once used for its own work. Among the operating machines are bandsaws, tablesaws, dovetailer, tenoner, joiner, planers, and molder, most dating from the 1920s and 1930s. The adjacent saw mill building houses three Yates bandsaws that are three-stories tall. ■

CALENDAR

2004

Aug. 13-19: Assn. for Industrial Archaeology Annual Conference, Hatfield, U.K. Tours of industry and IA in Hertfordshire and Lea Valley. Info: AIA Office, School of Archaeological Studies, Univ. of Leicester, Leicester LE1 7RH, U.K. Phone: 0116-252-5337; AIA@le.ac.uk; www.industrial-archaeology.org.uk.

Aug. 18-21: Society for Commercial Archeology Annual Conference, Seattle, WA. Tours of 1964 World's Fair site, Pacific Highway. Info: www.sca-roadside.org.

Sept. 16-19: Third International Early Railways Conference, National Rwy. Museum, York, U.K. Info: National Rwy. Museum, Leeman Road, York YO26 4XJ, U.K. Phone: 01904 621261.

Sept. 28-Oct. 3: 4th International Conference and Workshop on Industrial Archeology, Baia Mare, Romania. Tours and paper sessions. Info: Irina Iamandescu, Romanian Ministry of Culture & Religious Affairs, Directorate for Historic Monuments & Museums, Sos. Kiseleff 30, Bucharest, Sector 1, 011347, O. P. 33; irina.iamandescu@cultura.ro; tel: 40-21-224-44-21, fax 222-82-39.

Oct. 7-10: Society for the History of Technology Annual Meeting, Amsterdam, Netherlands. Info: www.shot.press.jhu.edu.

Oct. 9-11: Iron Symposium, Farmers' Museum, Cooperstown, NY. See article in this issue. Info: Karen Wyckoff, (607) 547-1410.

Oct. 13-17: SIA Fall Tour, Wilmington, DE. See the SIA Web site (www.sia-web.org) for updates. Brochures will be mailed to members in late summer. Info: Mary Habstritt, siaevents@aol.com.

Oct. 21-23: Pioneer America Society Annual Conference, Newtown, PA. Paper proposals requested. Theme: The Cultural Landscape of Southeastern Pennsylvania. Tours of Moravian Pottery & Tile Works, Mercer Museum. Info: David Kimmerly, 1137 Park Ave., Lansdale, PA 19446; (215) 361-0272; kimmerly@comcast.net.

2005

Feb. 26-28: 4th Savannah Symposium: Architecture and Regionalism, Savannah College of Art & Design, Savannah, GA. Documenting and interpreting regional architecture, tourism, and building technologies and materials. Info: www.scad.edu/archihist/main.htm.

Mar. 5-6: Sixth Biennial Symposium on the Historic Development of Metropolitan Washington, D.C., School of Architecture, Univ. of MD, College Park, MD. Sponsored by the Latrobe Chapter of the Society of Architectural Historians. Theme: Washington Builds for War: Defense, the Homefront, and Security in the Capital Region. Paper session and bus tours of related sites. Info: Lisa Davidson, lisa_davidson@nps.gov.

Apr. 6-10: Society of Architectural Historians Annual Conference, Vancouver, BC. Theme: Obsolescence in Modern Architecture. Paper proposals requested. Info: www.sah.org.

May 4-7: Heritage of Technology-Gdansk Outlook 4, Gdansk, Poland. Info: Robert Kapsch, (202) 619-6370; robert_kapsch@nps.gov; also <http://hotgo4.mech.pg.gda.pl/hot-go4.html> or Conference Coordinator, Bozena Klawon, Gdansk Univ. of Technology, ul. Narutowicza 11/12, 80-952, Gdansk, Poland; tel. + 48 58 347 2929; hotgo4@mech.pg.gda.pl.

May 19-21: Business History Conference, Minneapolis, MN. See article in this issue. Info: Roger Horowitz, Business History Conference, Box 3630, Wilmington, DE 19807; (302) 658-2400; rh@udel.edu.

June 2-5: SIA Annual Conference, Milwaukee, WI. Info: Mary Habstritt, siaevents@aol.com. ■

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