About 125 SIA members and guests gathered in Cincinnati, May 31-June 3, for the 41st Annual Conference. This was the Society’s second visit to Cincinnati; the 7th Annual Conference was held jointly in Louisville, Ky., and Cincinnati in 1978. Participants in this year’s conference included a contingent from the Association for Industrial Archaeology, the SIA’s British counterpart. They had built a ten-day Study Tour of IA sites in Indiana, Ohio, and Michigan around the SIA’s annual event. Several SIA members donated their time and knowledge to developing the AIA’s itinerary and were traveling with the group. It was quite a pleasure to have the AIA members at our conference, and we hope that there will be future opportunities for joint events on both sides of the Atlantic.

Steamboats helped Cincinnati to become the chief port on the Ohio River in the second quarter of the 19th century. During the 1820s, it earned the nickname “The Queen City” or the “Queen of the West,” a moniker that the city’s merchants felt befit their economic ambitions and their vision for the class of city Cincinnati was to become. True to predictions, Cincinnati grew into the most populous city in the Midwest prior to the Civil War. It also became known as “Porkopolis,” a far less regal recognition of its fame as a center of salt pork packing. Transportation and urban infrastructure were recurring themes of the conference, and one of the process tours even visited a sausage factory, a vestige of the region’s once mighty meatpacking sector.

The conference schedule followed the pattern of past conferences with pre-tours and workshop on Thursday, historic site and process tours on Friday, paper sessions and Annual Business Meeting on Saturday (see articles elsewhere in this issue), and post-conference tours on Sunday. The “Cincinnati Landmarks” paper session was recorded by

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The SIA Newsletter is published quarterly by the Society for Industrial Archeology. It is sent to SIA members, who also receive the Society's journal, IA, published 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 $50; couple $55; full-time student $20; institutional $50; contributing $100; sustaining $150; 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; Website: 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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The Carew Tower offered an expansive view of the waterfront, including the Roebling Bridge (right).
The 2012 Robert M. Vogel prize is awarded to Robert W. Passfield for his article “St. Andrew’s Caméré Curtain Bridge Dam, Lockport, Manitoba,” which appeared in IA, The Journal of the Society for Industrial Archeology, Vol. 33, No. 2, 2007. This paper combines engineering analysis, landscape archeology, and social history. The unprecedented size of the dam, incorporation of a submerged overflow dam and the use of electrically powered equipment all contribute to making this an innovative structure. The environmental setting and economic factors in Canada underlying the large-scale application of technology developed in France are described. Excellent historical engineering drawings support a clear explanation of the technical developments and modifications in design of movable dams. Detailed drawings and photographic images document the St. Andrew’s project and provide a thorough description of the structure and its operation. The narration and figures show modifications undertaken during the life of the dam and the continuing significance of the project to the area and Canada. Robert’s paper combines physical and documentary evidence to convey high level IA. Robert is a public historian and Senior Historian Emeritus, Parks Canada Agency.

Each year the SIA recognizes outstanding scholarship in the field of industrial archeology with the Robert M. Vogel Prize. Named for SIA founding and distinguished member Robert Vogel, the award honors the author of the best article to appear in the journal IA within the past three years. The prize consists of a cash award and a wooden foundry pattern bearing a plaque engraved with the recipient’s name. Articles selected must have a clearly stated thesis and well-constructed narrative. Analysis of material culture and high-quality illustration that support the thesis and conclusion are also important measures of scholarship worthy of the prize. Selection is made by the Vogel Prize Committee consisting of five members appointed by the president, who serve five-year terms.

of the wind-tunnel testing of the fuselage of the aircraft. He pointed out modifications to the rear-loading ramp door that he initiated to decrease turbulence and improve stability and controllability.

On Friday, five tours followed itineraries to explore various facets and geographic areas of Cincinnati’s industrial heritage. Following are summary reports provided by participants who volunteered to take notes and provide write-ups.

The Downtown Cincinnati Tour visited the Chris Erhart Foundry and Machine Co., established 1854, one of the few remaining active industries near the Ohio River waterfront, specializing today in jobbing and semi-production runs of gray and ductile iron. This was followed by a guided tour of the John A. Roebling Suspension Bridge spanning the river between Cincinnati and Covington. Personnel from the Kentucky Transportation Cabinet guided the tour, which included a view inside the towers. Construction on the Roebling Bridge began in 1856 and took ten years to complete due to suspension of work during the Civil War. Originally known as the Covington-Cincinnati Bridge, the bridge is a rare example of one that has since been named after its engineer. Roebling was, of course, one of the world’s great suspension bridge designers.

Next on the Downtown Tour was the Mill Creek Barrier Dam & Pumping Station, a U.S. Army Corps of Engineers project constructed from 1941 to 1948 to prevent Ohio River floods from backing up Mill Creek Valley and disrupting rail lines and industries located in that area. Following lunch at the Rookwood Restaurant, located in a former pottery, the Downtown Tour enjoyed the architecture of the Over-the-Rhine Brewery District, a historic neighborhood developed by German immigrants, many of whom arrived in Cincinnati following the failed German Revolution of 1848. Located along the Miami & Erie Canal, the area became known not only for its breweries but also for lumberyards, pork packers, and tanneries. Today, the architecturally decorative breweries are a highlight of the district. There are approximately 47 surviving buildings from 14 different breweries.

The Downtown Tour’s final stop was Union Terminal, built in 1933 to centralize the freight and passenger operations of seven major railroads: the Big Four (aka Cleveland, (continued on page 4)
Inside Tower A at Union Terminal.

Cincinnati, Chicago & St. Louis Ry.), Pennsylvania, Chesapeake & Ohio, Norfolk & Western, Southern, Louisville & Nashville, and the Baltimore & Ohio Railroads. The terminal really was where the North’s and the South’s rail systems met, and it remains to this day a major railroad hub. The railyard was on full display from Tower A, which was the terminal’s main control tower and is now the museum of the Cincinnati Railroad Club. Though the terminal still serves as Amtrak’s station, most of the space has been turned over to museums including the Cincinnati History Museum, which hosted Saturday night’s conference banquet.

The Upriver Cincinnati Tour began with a visit to the Cincinnati Water Works Richard Miller Treatment Plant and Pumping Station. The Old River Station is the oldest component of the facility, and from the IA perspective without doubt its most spectacular. Built from 1898 to 1906, the Old River Station is a circular-in-plan, Richardsonian-style masonry building housing what are generally regarded as the tallest steam pumping engines in existence. At 104-ft. tall from base to head, the 1,000 h.p., 1,400-ton, vertical triple-expansion engines were designed by John H. Lewis and the R.D. Wood Co. of Philadelphia and manufactured by the Camden (N.J.) Iron Works. With a stroke of 96 inches, the three engines each power a 26-ton plunger that moves four tons of water for each revolution of the 24-ft. diameter flywheel. The engines were retired in 1963 but are being well cared for by a group of volunteers and waterworks employees. The tour also included the plant’s Filter Building, where rapid-sand filters process the water pumped directly from the Ohio River. The building, like so much of Cincinnati’s mid-20th-century architecture, is Art Deco in style. The main lobby has been converted into an exhibit telling the history of Cincinnati’s public water supply, including 19th-century problems with sanitation, disease, and flooding that led to the establishment of this facility.

Near the waterworks is Lunken Airport, featuring a terminal that is another of the city’s Art Deco gems. The terminal building dates to 1936-37, and its lobby contains gorgeous murals depicting “man’s liberation from the hand of gravity through the wonder of aviation.” Karen McDonald, the terminal’s manager, led us through the terminal and to several early 20th century hangars that co-exist with more modern facilities servicing corporate jets and general aviation.

Following lunch, catered by the terminal’s restaurant, the Upriver Cincinnati Tour’s next stop was the Verdin Company, a renowned maker of bells and clocks. Verdin was established in 1842, when two French immigrant brothers, Francois and Michel Verdin, came to Cincinnati from Alsace where they had learned iron-forging and clock tower-making skills. Their first installation was a clock in Cincinnati’s Old St. Mary’s Church. Amazingly, the company is still family-owned and managed, and we were greeted by Tim Verdin, a sixth-generation descendant of the founders. Verdin boasts of having installed over 50,000 tower clocks in churches, universities, businesses, and municipalities since its founding. The company still casts bronze bells, and Tim Verdin
had saved a couple of castings to late Friday afternoon so we could watch the process. It was also clear, however, that Verdin has adapted to the times, and we were shown some of the digital recording equipment used to reproduce the sound of cast bronze bells. Following this fascinating process tour, the last stop of the day was Zakira’s Garage, a vintage automobile restoration service specializing in racecars. After a brief introduction, the tour group was given free reign to examine the dozens of cars in various states of restoration.

The Paper Trail Tour headed north through the Great Miami River Valley, home to major paper and aviation-related industries. The first destination was Middletown, home to historic aircraft manufacturer Aeronca and Wausau Paper. Aeronca, short for Aeronautical Corp. of America, was founded in 1928 to supply individual monoplanes for the commuter market in lieu of cars. The factory stood at Cincinnati’s Lunken Airport (see above) until 1940, when, in the wake of the 1937 flood, the factory was disassembled piece by piece and moved to Middletown. Although the company’s distinctive “flying bathtubs” went out of production in 1951 and have become collector’s items, the company survived by entering the subcontractor market (with Boeing initially and then with other aircraft manufacturers). Now a subsidiary of Magellan Aerospace, it supplies component parts for Boeing, General Electric Aviation, Raytheon, and Airbus. Jet engine tail pipes are a specialty, making Aeronca, according to our host Keith Wyman, the “Midas Muffler of aviation.” During the tour, we watched a riveting machine that drills, countersinks, and installs rivets; computer-controlled water jets cutting metal parts from plates up to 4-inches thick; and the hand crimping and mechanical welding of titanium honeycomb components. Devices for the cold forming of sheet metal by hydraulic dies were described but not observed in operation.

Next we visited Wausau Paper, a manufacturer of towel and tissue paper. The company has produced paper on its site since 1852, but the current plant dates to the early 1980s. A “green-certified” operation, it turns out 325 tons daily of commercial-grade, non-residential hand towels and bathroom tissue from recycled wastepaper. Much of the plant’s most complicated work involves the removal of adhesives from the waste fiber. Production engineers insist they are making “a silk purse from a pig’s ears.” A major problem for Wausau is removing the high amount of trash thrown into public recycling containers. The initial step involves grinding the wastepaper and creating a slurry. Then a flotation system removes impurities and a series of progressively finer screens removes foreign objects ranging from rocks, to plastic, to adhesive tapes and latex. Bales of pulp ready for the paper lines are created faster than they can be converted into paper products and are stored in an open-air, outdoor lot. Paper is created on a line traveling at 70 mph and seems to magically appear as the pulpwood is injected onto forming fabrics and then quickly dried in a so-called “yankee.” Pairs of tissue rolls are wound onto a single drum to create two-ply tissue.

Lunch was served in historic downtown Lebanon, the county seat of Warren County, at the famous 1815 Golden Lamb Inn, said to be Ohio’s oldest continuously operating business. While we waited for our lunch to be served, local historian John Zimkus regaled us with stories about the dozen U.S. presidents—all with beards—and other famous visitors, such as Charles Dickens, who have visited, eaten, or slept at the inn. Following lunch, we had the option of touring the nearby Warren County Historical Society museum,
whose collection of Shaker material is widely recognized, or going on a walking tour of Lebanon led by John Zimkus. Those on the walking tour saw a restored 1920s filling station, a railroad siding with passenger cars from the Lebanon Mason Monroe Railroad excursion line, the Elbinger shoe factory that operated from 1911 to 1955 and has been converted to an antiques mall, and an 1879 firehouse named—because it was in the far east end of the city—the Orient. Reboarding the bus, the group headed back towards Cincinnati to College Hill to visit Laurel Hill, the 1907 home of Peter Thomson, founder of the Champion Coated Paper Co. in Hamilton. Now owned by Larry and Judy Moyer, who live in the 20,000-square-foot, 36-room Beaux-Arts mansion and rent it out for weddings and banquets, it was designed by architect James Gamble Rogers. The house was plumbed for hot water radiant heat and wired for electricity from the beginning and, consisting of brick, concrete, steel, limestone, and granite, was considered fireproof. Judy Moyer, our tour guide, proved extremely knowledgeable on the home’s architecture and historic mechanical systems as well as the Thomson family and corporate history.

The Northern Kentucky Tour. After starting the day, Cincinnati-style, with a hearty breakfast of goetta and eggs, we were off to … a goetta factory! Glier’s Goetta in Covington, just across the Ohio River from the Queen City, has been making goetta (pronounced “get-uh”), a traditional German sausage made of beef, pork, steel-cut oats, onions, and spices, since 1946. President Dan Glier, who followed his father, Robert, into the business and still uses the original family recipe, escorted us through the cold and slippery but spotless plant, which occupies part of the old Bavarian Brewery, leading us past the two-man vacuum packaging line and into the kitchen, where burly cooks preside over 300-gal. steam jacketed kettles. Ninety percent of Glier’s market for goetta (they also make bratwurst) lies within a 25-mi. radius. At the conclusion of the tour, we were invited to sample grilled goetta on sandwich buns. Delicious!

At the TMK-IPSCO pipe mill in nearby Newport, the site of iron or steel operations of one kind or another since the mid-1880s, we traded our hairnets for hard hats, safety glasses, and earplugs. Using electric-resistance welding, the present company makes pipe for the gas and oil industry. Manager Jim Truscott showed us through the 8-in. mill, where we watched steel plate make its way successively through shaping, welding, annealing, and chamfering operations.

After enjoying chicken schnitzel and steins of beer at the Hofbräuhaus in Newport, we browsed through the local history collection of the Behringer-Crawford Museum in Covington before heading to the Railway Museum of Greater Cincinnati, which occupies a former railroad junction in Latonia, now a neighborhood of Covington. Tim Hyde, our knowledgeable bus guide and a trustee of the museum, showed off some of the highlights of the collection, including a 1950 EMD freight locomotive, a 1939 Pullman sleeper, a World War II-era Pullman troop sleeper, and a private car built in 1906 for an executive of the Cincinnati Southern Ry. Much of the rolling stock is undergoing restoration.

The Countryside Tour. Knowledgeable tour guides Dave Neuhardt and Ron Schmidt provided background history and pointed out several former industrial sites along our hour-long trip out to the countryside to view the industries once served by the Little Miami River and Little Miami Railroad (LMRR). Our first stop was Xenia Foundry & Machine. Founded in 1920 by Ward Huston and a partner, the company was attracted to the area by local boosters who offered real estate in exchange for stock in the business. We were greeted warmly by Bob Huston, grandson of the founder, who provided an excellent overview of the foundry process as well as highlights of the company history. The Little Miami River Valley proved to be a good location as southern Ohio had iron ore and a local supply of sand with high clay content for molds; Ohio is still a leader in the foundry business with about 250 foundries out of 1,300 nationwide. Xenia Foundry is a small job shop that specializes in gray and ductile iron castings. Their biggest customer is the natural gas industry for which they make compressor parts for gas distribution;
other products include parts for elevators and for glass manufacturing. Patterns are still usually wood, although the company recently moved to chemically bonded sand (bonded with a phenolic ester and catalyst) for most molds as this takes less gating than traditional green sand (bonded with Bentonite clay and water) and so reduces cost. At the end of the presentation, Huston challenged us to guess the weight of a 12-in.-by-12-in. block of cast iron and Bill Lannin won a screwdriver when he correctly guessed 450 lbs. Although a pour had been planned for our visit, business had slacked off and the foundry had finished the last pour of the day at 6 a.m. We walked through the foundry, past the freshly filled molds still emanating heat, to watch a demonstration of sand being packed in a drag and a cope.

Next we hiked through the Clifton Gorge State Nature Preserve, which contains remnants of a number of water-powered mills, including those of the Patterson Woolen Mill. While there, we also viewed two lovely stone arch bridges built in the mid-19th century by a private turnpike company. Lunch was provided in the dining room of the Historic Clifton Mill. This gristmill was established in 1802 and is now operated as a tourist destination with a gift shop featuring its own brand of flour. Milling stopped about 12 years ago and is now outsourced to protect the mill's historic fabric. During our tour some of the belt-driven conveyors were turned on to give some sense of its past life. Driving on, we had the opportunity to take photos of the 1821 Grinnell Mill, a gristmill that recently opened as a bed-and-breakfast. We passed limestone kilns that served quarries near the town of Yellow Springs. Antioch College there has a large presence in the area; its theater department occupies a former foundry building used by General Motors during World War II.

Our next stop was to view remnants of the Miami Powder Co. works on land now farmed by Scott Hammond and his family. A gunpowder mill was founded on the site after the LMRR came through in 1846. Originally the mill was powered by water but eventually it was converted to electrical motors, placed outside the buildings to reduce the chance of explosions. Still, the nature of the work meant that explosions were common, and a large one in 1925 finally closed the plant. After viewing buildings near the former rail line, we prepared to ride a farm wagon across the river to see what was left of the water-powered portion of the works. With the wagon hitched to the farm's tractor, we began boarding, only to have half the group fall off the wagon. Literally. The floorboards gave way, and the bench on one side started heading for the ground. No one was hurt as we all scrambled to grab the hands of those hurtling backward. Needless to say, we did not make it over the river.

Our last stop was at the abandoned King's Powder Mill and Peters Cartridge Co. Since our tour guides were not able to negotiate access to this Superfund site, we could only view it from the bike path that today runs along the former LMRR right-of-way. J.W. King, who had also been an owner of the Miami Powder Co., began the new company by buying 832,000 lbs. of surplus musket and cannon powder after the Civil War and re-manufacturing it for sporting use, undercutting competitors’ prices. Like the many mills of the Little Miami region, King’s was originally powered by water but soon installed steam engines to handle the expanding business. A daughter of King married Gershom Moore Peters, a minister and inventor who designed a mechanized shotgun shell loading process. Shells had been loaded by hand until Peters patented his rotary shell-loading machinery in 1887.

Sunday Post-Tours. A Historic Bridge Tour and a Cemetery Tour were the featured options for those conference participants desiring to spend an extra day in the Queen City. The bridge tour, led by Patrick Harshbarger and Bill Vermes, managed to visit ten bridges in little less than seven hours. The bridges were selected to represent Ohio’s diverse bridge-building heritage and included good examples of covered timber truss, iron bowstring truss, steel truss, and reinforced-concrete arch types. The tour included several nationally significant bridges, notably two important examples of early reinforced-concrete construction: the Cliff Drive Bridge, a Melan-type arch built in 1895, and the Benson Street Bridge, a tied through arch built in 1909. Both are among the nation's earli-
The Old Depot Museum, Vicksburg, Miss., held its grand opening on July 15. The museum is located in the 1907 depot of the Yazoo & Mississippi Valley Ry. Its exhibits feature models of 250 ships and boats, 175 cars dating to the early 1900s, plus model trains, and oil paintings of Civil War ships and river battles. A sidewalk connects the museum to the neighboring MV Mississippi IV, the centerpiece of the U.S. Army Corps of Engineers’ new Lower Mississippi River Museum & Riverfront Interpretive Center. Exhibits at the center include a functioning water table modeling the Mississippi. Info: www.theolddepot.net.—Jackson (Miss.) Clarion Ledger (June 13, 2012)

TechWorks!, a new museum of technology and industry, is in the planning stages in Binghamton, N.Y. The museum will be located in the former General Ice Cream Co. creamery, dating to the early 20th century. The site is a nexus of transportation with a railroad crossing the property, the Chenango River to the west, and Water Street to the east. Within view is the Marconi Tower, used in 1913 to send the first radio call to a moving train, proving that radio transmissions could be sent to a moving object. Just a short drive away is the company town of Endicott, which is named after Henry B. Endicott, the founder of the eponymous shoe company. Endicott was born of shoes, but it is perhaps best known as the “Birthplace of IBM.” The Computing Tabulating Recording Co., the precursor to IBM, was founded in Endicott in 1911 based on the punch card tabulating technology developed by Herman Hollerith. A TechWorks! concept plan is currently being worked on by the Bucher/Borges Group (BBG), a consulting firm based in Easton, Md. The museum will emphasize green design and include engaging exhibits on the innovative processes of science, technology, engineering, and entrepreneurship.

Trenton Makes Pottery: The Stoneware of James Rhodes, 1774-1784 will be on exhibit at Ellarslie Mansion, the Trenton (N.J.) City Museum, through Jan. 13, 2013. Rhodes is one of the few known American stoneware potters of the colonial period. His existence and distinctive wares came to light over the past decade following the archeological discovery of two kiln sites within the City of Trenton and some painstaking historical research into colonial documents. The exhibit explains the discovery of the kilns but focuses mainly on displaying the extraordinary variety of grey salt-glazed stoneware products reassembled from the fragments recovered from the archeological sites. Rhodes employed some signature decorative motifs that distinguish his products from those of other potters—floral designs and rough geometric patterns, executed in naturalistic style in painted blue cobalt—but perhaps his most engaging trait was the quirky application of molded faces on the shoulders of some jugs and pitchers. Info: Trenton Museum Society, (609) 989-1191; tms@ellarslie.org.

Queen City (continued from page 12)
est surviving examples of their design. The Bridge Tour culminated with a walking tour of the Roebling Bridge (see above).

The Cemetery Tour headed to the north side of town to Spring Grove Cemetery, a final resting place since 1846. Prominent people buried here include Messrs. Procter and Gamble, political boss George B. Cox, and well-known industrialists like Charles Fleischmann (of yeast fame) and Powell Crosley, Jr., of automotive and radio fame, whose name graced the Cincinnati Reds’ longtime home stadium. The cemetery boasts a chapel that is a popular venue for weddings (in fact, the cemetery currently has many more weddings than funerals). Among the attractive monuments and mausoleums are several examples of “German tree stumps,” a distinctive monument style in the form of an elaborately formed tree trunk. This type of memorial is generally associated with a specific family, and is heavy with symbolism. Cut-off branches along the trunk represent lives cut short, while a finger pointing upwards reminds a viewer that the person has gone to heaven. Individual family members may be depicted as altar boys, lambs, or young animals. All in all, Spring Grove is a beautiful and restful place in which to spend one’s eternity.

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Mary Habstritt, Patrick Harshbarger, Carol Poh, Joe Seely, and David Simmons