

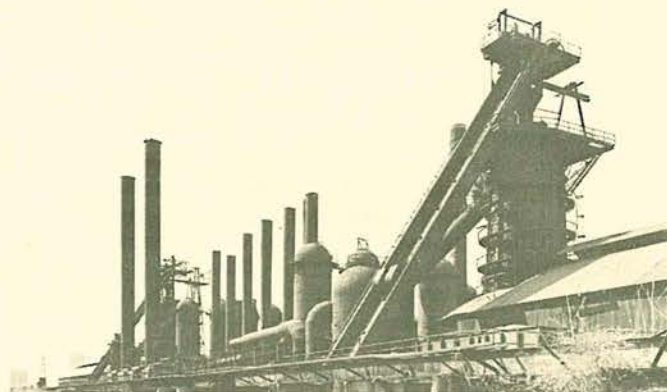
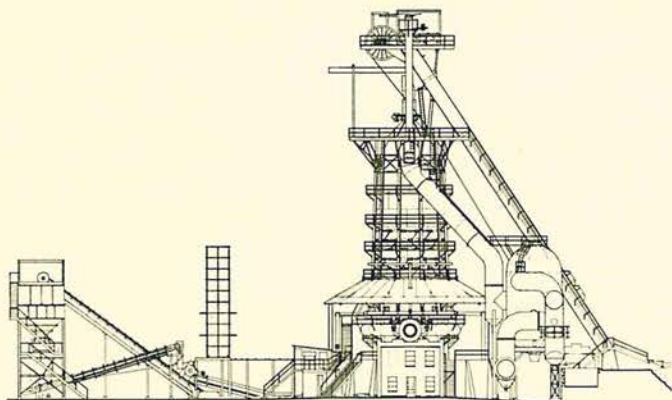
SOCIETY FOR INDUSTRIAL ARCHEOLOGY

NEWSLETTER

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PRESERVATION OF SLOSS FURNACE, BIRMINGHAM



SLOSS BY HAER. (L) No. 1 Furnace, 1902: S.W. face. Drawing by James T. Hunt. (R) High Furnace; blast-air heating stoves; and No. 2 Furnace—looking west. Jack E. Boucher photograph.

PRESERVATION OF SLOSS FURNACE, BIRMINGHAM

The preservation of one of Birmingham's historic industrial landmarks, the Sloss [blast] Furnace [NR, HAER], is now assured [SIAN Nov. 72:1]. This was accomplished last spring by the citizens of Birmingham in approving a \$3-million bond issue for this purpose, which was supported by Mayor David Vann and the City Council. Citizen support was generated by the Sloss Furnace Assn. [SFA] and the Citizens Advisory Board of the Citizens Participation Plan. The bond issue was preceded by two events that rallied public interest around the furnace.

The first was that in early 1976 Eric N. DeLony [SIA] of HAER proposed to the Mayor and Council that a detailed recording project be conducted of the furnace. It was pointed out that Sloss was one of the few fully-intact early-20thC blast furnaces remaining in the U.S. The M&C agreed to fund the survey, carried out by a team of six architects and historians during the summer of 1976.

Inspired by this, the M&C created a special Citizen's Study Comm. to determine whether, and how, the property should be developed. Based on the Comm's. report and the results of the HAER project, the M&C proposed the inclusion of \$3 million for this project among 13 bond-issue proposals.

Mayor Vann and the Council now are proceeding to develop the property as a museum of industrial history, for which purpose it was donated to the city by Jim Walter Corp. whose U.S. Pipe & Foundry Divn. was the furnace's last operator.

Following passage of the bond issue, the Jim Walter Fndn. made a gift of \$100,000 to the City to further the project, simultaneously appealing to the area's industries and to other foundations to contribute also.

Mayor Vann's leadership continues to move the project forward. He has been instrumental in obtaining a \$370,832 Special Projects Grant under Title VI of the Comprehensive Employment Training Act, which is being used to clean up the 18-acre site, clean and paint the structures, and fence the property.

While this has been going on, the SFA has assisted by working with the City and the L&NRR to assure adequate access and to improve 32nd St., the site's main entrance.

SFA also has been studying which of the complex's elements should be preserved and how. Some ideas put forward by SFA and others include:

- displays on the pig-iron and steel-making processes, and on facilities past and present in the Birmingham area;
 - tours to related iron, steel, and mining facilities in the district;
 - geological exhibits on local mineral deposits and the various processes used to extract them;
 - a full-scale foundry, bee-hive coke ovens, and even the possibility of an open-hearth furnace on the site.
- Other proposals under consideration are:
- the use of part of the land for a RR museum, an aviation museum, a fire-fighting museum, and an Indian museum;
 - an on-site motel;
 - a full-scale or mini "theme park."

This March, the facility in its present state is to be used as a filming location for the movie *Ravagers*.

The Mayor, his staff, and the City Council are now actively exploring the course to be followed in developing one of the most significant historical industrial facilities in the Southeast. R.S.C.

CONTRIBUTORS TO THIS ISSUE

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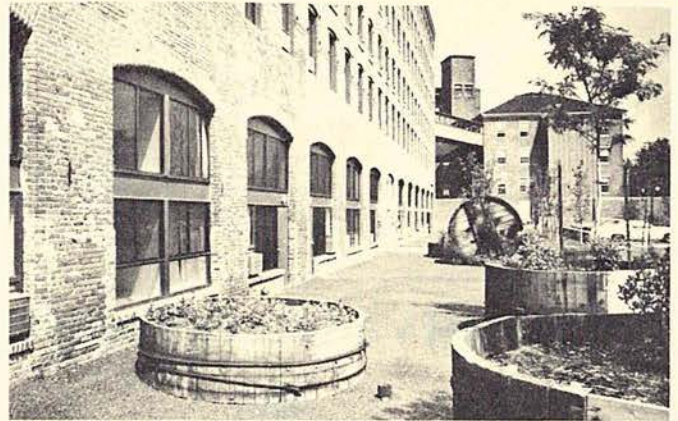
MASSACHUSETTS INDUSTRIAL BUILDINGS INTO HOUSING

Developers in Mass., with financing from the Mass. Housing Finance Agency, are tapping the supply of abandoned industrial buildings throughout the Commonwealth for use as mixed-income housing.

The former Chickering Piano Factory (1850) in Boston's S. End was converted into combination living/working spaces for artists and craftspeople after a market study identified the need for this type of facility in the area [SIAN May 74:1]. Provided with moveable closets, the spacious units were left unstructured—adaptable to the tenants' diversified needs. Oversized door openings were built and a freight elevator refurbished to facilitate movement of heavy materials such as sculptors' stone. Said at one time to be the nation's second largest structure, the newly-named "Pianocraft Guild" now houses an active artists' association and provides exhibit space for their works in the joint entrance/gallery area. The structure was featured in the SIA slidefilm *Working Places*.

In Cambridge, a building (c1880) that at different times housed both the Will Scientific Instruments Co. and the George Close Candy Co. was spared from the wrecker's ball and renovated as community housing. This neighborhood landmark now provides badly needed housing for long-time Cambridge residents who no longer require single-family housing and have been unable to find affordable alternatives within the community. The multi-windowed units are highlighted by exposed brick walls and wooden beams and columns restored to their natural finishes. To promote a sense of community among tenants, gathering areas also were included in the new design. The most interesting of these was formerly a 1½-story loading dock. It now serves as both lobby and meeting area.

Old New England mills make attractive targets for conversion into housing because of their design potential and location, traditionally both central and picturesque. The Northbridge Cotton Mill was built c1850 on the banks of the Mumford River during the heyday of the region's textile industry. Used later for chemicals manufacturing and eventually vacated, the impressive



Courtyard of the apartment complex in the former A.C. Lawrence Leather Co. buildings. Phokin Karas photograph for MHFA.

granite structure has been converted into 55 apartments for the elderly. The mill's chestnut beams and granite walls were incorporated in the renovation and resulted in many "one-of-a-kind" units.

The Leeds Textile Mill in Northampton, built a century ago to produce thread for the Nonotuck Silk Co., stood vacant after production ceased in the 1930s. Nineteen apartments plus two artists' studios (accessible by an elevator installed in the 100-ft. bell tower) now occupy the Victorian structure.

In Peabody, once referred to as the "leather capital of the world", the A.C. Lawrence Leather Co. complex also has been converted into a residential community for the elderly [SIAN Mar. 74:2]. The "gut" renovation of the two main tannery buildings resulted in 284 apartments connected by elevated glass walkways to the one-time owner's mansion—now management offices and a community center. The imaginatively landscaped 8.7-acre site includes a mill pond bordered by plaza areas featuring tanning-drum planters and steam pumps displayed as sculpture. M. V.



Nonotuck Silk Co. thread mill, Leeds, Mass. (near Northampton), converted to apartments. (R) One of the artists' studios. Vincent S. D'Addario photographs for Massachusetts Housing Finance Agency.



ASTONISHINGLY EARLY INDUSTRIAL RE-USE OF INDUSTRIAL STRUCTURES

"In 1654 a ship loaded with gunpowder exploded in the port of Delft (Netherlands) destroying a large part of the city and many of the potteries, at a period when most of them were expanding. The old Delft brewing industry was in decline and many of the former breweries stood empty. Having access to water for heavy materials, they were suitable for conversion into potteries, and within a few years most of them were once again active. The apparent calamity

probably helped the potteries considerably at a moment when they needed larger premises. As pottery factories, the names of the old breweries became famous throughout Northern Europe: The Double Tankard, the Peacock, the Young Moor's Head, . . . and many others."

(From *Tin-Glaze Pottery in Europe & the Islamic World*, by Alan Craiger-Smith, London, 1973.)

1890 SCOTTISH TRUSS BRIDGE DISCOVERED IN HAWAII



British civil engineering on American soil. Donald C. Jackson photo.

Dr. Barnes Riznik, curator of the Waioli House Museum in Hanalei, recently discovered an 1890 riveted Warren pony truss fabricated by James Findlay & Co., bridge builders, of Motherwell near Glasgow. Originally part of a three-span bridge over the Wailua River, the truss was moved to its present site on the island of Kauai in 1919. At that time, Kauai's first trained civil engineer, Joseph Moragne, put on a reinforced concrete deck (using RR rails as reinforcement) and added some I-beams under the deck for extra support. Aside from this, its structural integrity is intact and the wrought iron is in good condition. The bridge's long life in such a corrosive tropical environment is a simple result of the hardness of the wrought iron. Riznik points out that more recent steel bridges in Hawaii have rusted considerably. The bridge—the only known British truss bridge in the U.S.—differs radically from American pin-connected designs of the same era. Research on the structure's history is underway in preparation for a Natl. Register nomination.

During the late 19thC the Pacific Ocean was a kind of "battleground" between American and British industrial firms, both of whom wanted to control development of the region. The marketing of railroad and highway bridges was a lucrative aspect of this industrial development. British interests were the first to market bridges in the area, although by the mid 1880s American bridge companies were beginning to find buyers there.

The existence of the Kauai truss provides striking proof that Britain's industrial influence stretched around the world in the latter part of the 19thC and into areas which during the 20thC were completely dominated by American industries. D.C.J.

IRON MINE REVIVAL

The Mt. Hope Iron Mine, perhaps the nation's oldest and deepest, was reopened in Oct., 1977. Lying near Wharton in the hills of northern New Jersey, the mine again began yielding the same rich ore once used to make shot, cannon, and cooking pots for George Washington's Continental Army. At presstime, mining operations had ceased, temporarily.

The production history of the mine dates back to 1710, when wagons carried Mt. Hope ore to nearby blast furnaces in Whippany, Rockway, and Dover. For over 200 years Mt. Hope supplied industry with a rich, highly-concentrated lump ore well-suited for military uses. The mine's main shaft ultimately reached a record depth of 2,750 ft. Operations slowed with the discovery of midwest ore fields, and by 1959 ceased altogether with the growing importation of cheap foreign ore.

Today, with public and private funding available to encourage more domestic mining, the Mt. Hope Mining Co. is trying to make a comeback. Extraction and crushing machinery, idle since 1959, has been tuned up and put back on line. A 750-ft./min. man hoist and an 1800-hp ore hoist are in working condition. And the veins of high-grade ore are said to be rich enough to keep the mine active at least until the millennium.

Nevertheless, iron-ore supply and demand exists in an exclusive market system, often leaving revival operations like Mt. Hope out in the cold. After four months of renewed operation, the

mine closed down, overcome by funding problems. According to a reliable source (the company vice-pres.), mining could begin again by mid-year. Meantime, IA folk at least can take heart in seeing economic incentives helping a venerable industrial site get back on its feet. This fundamental marriage between profit-making and IA, so often an impass to historic preservation, probably is one of the most effective means of ensuring the survival of past industrial achievements. D.H.S.

THE MUSEUMS

MUSEUM OF YEAR AWARD TO IRONBRIDGE

The justly-celebrated Ironbridge Gorge Museum last February won the first European Museum of the Year Award, being selected from among nine finalists which included two other museums (in Belgium and Finland) that could be construed as "industrial archeological." The competition is sponsored by the Council of Europe, following generally the lines of Britain's own "Museum of the Year Award." That plan, inaugurated in 1972, recognizes the outstanding museum that has opened (or completed some important new facility) within the previous year. Ironbridge was selected as Britain's entry in the European competition on the strength of winning the 1977 national award.

The basis of the international award is less the technical excellence of the candidate museums than the success with which they appeared to have responded to two key questions: What battles had this museum to fight in order to get itself established? and "In what ways is this museum likely to change the course of museum thinking or museum practice, either nationally or internationally?"

Ironbridge Director Neil Cossons [SIA] received the £4,000 award—the prize money provided by IBM Europe—at a ceremony in Strasbourg. On the panel of four judges were Kenneth Hudson (UK) and Georges van den Abeelen (Belgium) [both SIA].



Moving the nearly restored *Liberty Bell Limited* into the shop on temporary trucks. Edward H. Blossom, restorer, at right. G. Wayne Laepple photograph.

Topton, Lehigh Co., Pa. Restoration of *Liberty Bell Ltd.* electric car No. 801 was nearly complete last November when the 1912 interurban car was dedicated. After 23 years on the Lehigh Valley Transit Co.'s Phila.—Allentown run, the car was phased out in 1935. Restoration, under the direction of Ed Blossom of the Dunshore Car Co., has taken three years with assistance from Penn DOT. The Car soon will run on a 4.4 mile track between Topton and Kutztown. Information: G.W. Laepple [SIA], Liberty Bell Jewett Soc., Box 144, Topton, PA 19562.

N.Y. Museum of Transportation. This volunteer museum in upstate N.Y. specializes in trolleys, including an 1867 John Stephenson Co. horse car, a 1914 Niles Co. car, and an 1893 car on loan from the Rochester Museum, as well as a 1911 Jewett Car Co. (Newark) car which has retained its running gear, lamps and poles since 1930 while used as a summer cottage. Future plans for several miles of track and acquisition of the last Rochester & Sodus Bay

Line trolleys will keep members busy. Box 136, W. Henrietta, NY 14586.

U.S. Army Transportation Museum. Devoted to the whole history of transportation, the collection is largely drawn from the U.S. Army Transportation Corps whose history is traced through exhibits and artifacts of Army contributions to marine, rail, and aviation transport, including experimental craft. Admission free. Bldg. 301, Fort Eustis, VA 23604; tour groups: (804) 878-5207.

Antique Wireless Museum. More than 28,000 artifacts of wireless telecommunication, slide-tapes of significant inventors and events, replicas of early wireless stations, and a research library are now housed in a restored academy owned by the East Bloomfield (N.Y.) Historical Society. L.C. Cundall, W2QY, 69 Boulevard Parkway, Rochester, NY 14612.

The Mariners Museum. Ship models, small craft, navigational instruments, figureheads, lighthouse & lifesaving equipmt., prints, paintings, and drawings only 20 minutes from Williamsburg, Jamestown, and Yorktown. Newport News, VA 23606. (804) 595-0368.



The Salt Museum. Onondaga Co. Dept. of Parks & Rec., Museums Office.

The Salt Museum. Exhibits of tools, photos, and documents interpret the salt industry of Onondaga Co., N.Y. in a WPA reconstruction of a 19thC boiling house incorporating the chimney of an original building on the site. Free; groups by reservation. Curator of Museums, Onondaga Co. Dept. of Parks & Rec., Box 146, Liverpool, NY 13088. (315) 457-6366.

Midwest Old Settlers & Threshers Assoc. Don't let the name fool you. This Iowa museum contains a huge collection of 19th and early-20thC steam, oil, and gas tractors, and stationary steam engines (including a working Corliss), all of which operate each year over Labor Day weekend! The 5-day fair also sports a narrow-gauge RR and a trolley line and has plans to expand its museums to tell the history of agricultural technology. Rural Route 1, Mt. Pleasant, IA 52641. R.M.C.

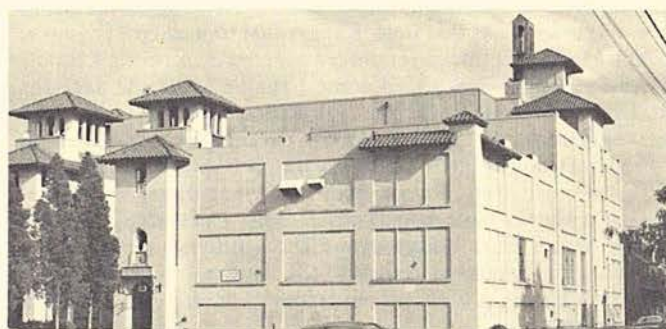
THE WORK OF I A

TRENTON INVENTORY. Recently published was *An Inventory of Historic Engineering & Industrial Sites, Trenton, N.J.*; the first comprehensive city-wide inventory of historic industrial sites ever undertaken in the state. The project was part of Trenton's Bicentennial Celebration Program and received the enthusiastic support of the City Council and the Landmarks Comm., the Historic Preservation Office, and HAER. The inventory was carried out by Trenton's Dept. of Planning & Development in the summer and fall of 1976. David V. Abramson and Terry Karschner [both SIA] were co-directors.

Trenton's industrial heritage is rich. Such modern giants as American Standard and Thermoid began locally. Three major industries served as the focus for the city's enormous activity: iron & steel; pottery; and rubber. Around them grew a vast array of other enterprises to support their many needs, utilizing the availability of a large skilled labor force. Trenton, located between New York and Philadelphia, also developed a great rail network to transport raw materials and finished products and was traversed by the Delaware & Raritan Canal (1830-1834), designed to link the Delaware River and the Port of N.Y.

Since Trenton's industrial zenith in the 1920s, many firms have disbanded or moved, leaving the city dotted with empty or underutilized structures. For example, only the pattern shop (1885) of the N.J. Iron & Steel Co. remains, isolated along the Delaware, on the site where the first American iron beams were rolled, c1856, by Peter Cooper and Abram S. Hewitt. Most of the great Maddock & Sons pottery complex (c1885)—first Major American manufacturer of sanitary porcelain—stands vacant. And all of the magnificent bottle kilns that gave Trenton a unique skyline were demolished years ago.

Many structures, however, still are in use, some by the original firms. The former Henry Clay and Bock & Co. cigar factory is used today by a printing firm. In order to avoid loss of business in its 1932 move to Trenton, the firm constructed an "authentic" Spanish Colonial factory. Bartley Crucible & Refractories Co., makers of industrial ceramics, occupies the old N.J. Pottery building, continuing to use some of the 19thC equipment. Crossley Machine Co., which supplied much of the equipment to the pottery firms, has been in continuous operation since 1888 and now makes the Fisher & Norris anvil, reputed to be the only U.S. anvil still



Henry Clay and Bock & Co. cigar factory in "neo-spanish" style, 1932. Trenton Dept. of Planning & Development.

manufactured.

Why is the Inventory important? It can serve two basic functions: as a planning aid and as an educational device. Previously, these early industrial structures usually were viewed as impediments to progress. It now is possible to integrate future development in Trenton with the historic industrial fabric. For example, the only remaining 19thC RR terminal—the Philadelphia & Reading Freight Station (1888)—is now scheduled to be rehabilitated as a community center for an inner-city housing development. The Inventory adds depth to existing histories of Trenton. The old buildings and equipment may help us to understand how work was carried on in 19thC industrial America. As a document that recounts the importance of many local firms it can serve as a source of pride to the many area residents whose grandparents and parents worked in Trenton's industries and helped build the community. D.V.A.

MISCELLANEOUS NOTES

News of Members

JAMES C. MASSEY has been appointed Exec. Director of the new Historic House Assn. of America, an arm of the Natl. Trust that will provide technical information and legislative support for the owners of historic houses, while. . .

THEODORE A. SANDE has succeeded Massey as the Trust's (acting) Vice President for Historic Properties, having been Asst. V.P.

Events

IA AT THE CANADIAN HISTORICAL ASSN. MEETING. 30 May. An IA session organized by Terry Brennan, Montreal, will include papers by David Newlands, archeologist, Royal Ontario Museum, and Gerald Bloomfield, geographer, Univ. of Guelph, and be chaired by Norman Ball, science and technology archivist, Public Archives of Canada [all SIA]. This meeting, taking place at the Univ. of Western Ontario, London, marks the first IA session held at a Canadian professional meeting.

MILL SEMINAR, 30 June-2 July: "Watermills & Windmills: Restoration, Operation, & Interpretation." Sponsored by Friends of West Point, Durham, N.C. Restored West Point mill to be in operation. SIA members J. Kenneth Major (The English Watermills), Grimsley Hobbs, Sr. (The Pleasures & Pains of Reconstructing Mills), Louis Hunter (Watermills & Industrial Tech. in America), and Derek Ogden (The Reconstruction of a Windmill) are among the speakers. Program details: Sher L. Sweet, FofWP, 410 Central Carolina Bank Bldg., Durham, NC 27701. (919) 682-5066.

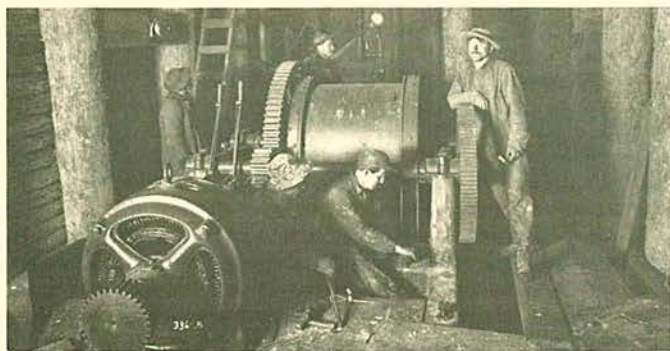
THE ROYAL HUDSON DISCOVER-BRITISH-COLUMBIA TOUR. The Royal Hudson 2860 (late 1940s), one of the locomotives that pulled trans-continental passenger trains through the Cdn. Rockies, is on a mission to spread the word of the Captain Cook Bicentennial taking place in B.C. this summer. Her tour begins 1 April. She will journey across Canada to Quebec City, and return west through Southwestern Ontario, the U.S., and returning to Western Canada on 25 April. (Winnipeg, 26th; Brandon, 29th; Saskatoon, 1-2 May; Vancouver, 8th. Check with CPR for details.) The RH2860 returned to duty in June, 1974. Her coaches—rescued from the CPR coachyards—depict Cook's adventurous career. They will be open to the public.

Archival Matters

EDISON PAPERS. A major historical project to compile and publish the voluminous papers of the Wizard of Menlo Park has been announced by the co-sponsors: the Heritage Conservation & Recreation Service (née Natl. Park Service); N.J. Hist. Commn.; Rutgers Univ.; and the Smithsonian Institution. A 15-20 Vol. edition of the most important papers is anticipated with something more comprehensive in microform. The project, to be based at Rutgers, is expected to take some 20 years to complete. Edison's papers, scattered among American and foreign repositories, number—conservatively—1.5 million pages. The project was launched by a feasibility study prepared by James E. Brittain [SIA] of Georgia Inst. of Tech., and funded by the Edison Electric Inst., a utilities trade group. Work will begin in the fall. A search for an editor is underway.

EISENBIBLIOTEK. That is to say, a library *on*, rather than *of*, iron exists in a former convent in Schaffhausen, Switzerland, a foundation of George Fischer, Ltd. (Mfrs. of steel and machine tools), notes Philip Bayer [SIA] in a report leading to a degree in IA (Empire State College, of the SUNY chain). The library was founded in 1948 to acquire historical and contemporary literature on the production and working of iron; on its application in artisan trades, industry, engineering, the applied arts, &c; and to promote research into the history of iron. Director Walter Maurmann oversees the 10,000-volume collection. Appropriate English-language acquisitions are sought.

BARNARD-STOCKBRIDGE PHOTOGRAPHIC COLLECTION. An incredible record of life in all aspects in the N. Idaho mining district of Wallace-Kellogg, 1894-1964, heavy in mining scenes, above & below-ground. Over 200,000, of which a selection of 5,000 now is avail. in the form of prints from the original negatives. Illus. brochure: Univ. of Idaho Fndn., 108 Admin. Bldg., Moscow, ID 83843. (208) 885-6395.



Interior of Rex Mine, Bradleyville (I), Idaho, 1920s. Barnard-Stockbridge Photographic Collection, Univ. of Idaho.

MS SOURCES FOR RR HISTORY. An article by Robert C. Post [SIA], in the Autumn 1977 issue of *RR History* (pp. 38-63) lists 500 sources of primary material on railroads, their builders, and other matters of interest. Each collection described and located. An important contribution.

GRIST MILL DRAWINGS. The Bale Grist Mill in the Napa Valley [SIAN Jan 77:6] has been fully measured and drawn by Calif.'s Office of the State Architect. The drawings are superb, showing all structural and mechanical detail, and include a fine isometric of the internal organs. 11" x 17" ozalids of the 11 drawings (half the original sheet size) are available from F.A. Riddell, Supervisor, Cult. Heritage Sectn., State Dept. of Parks & Rec., Box 2390, Sacramento, CA 95811: \$1.06. Checks to S.D. of P. & R.

SIA AFFAIRS

FALL TOUR

This tour, of Rhode Island IA, has been set for
29-30 October
Hold the dates—details to follow.

Chapter News

ROEBLING: N.Y. Harbor Tour on the Jersey Side. On 28 January 30 hearty souls toured a number of industrial and transportation sites on the N.J. side of the Harbor. Terry Karschner, Chapter Pres. and preservation consultant for the N.J. Hist. Pres. Office, organized and led the tour.



The 750-foot Hudson River front of the Erie-Lackawanna (ex-DL&WRR) rail-ferry terminal.

First stop was the Erie-Lackawanna Terminal in Hoboken, constructed in 1904-06 and designed by architect Kenneth Murchison and engineer Lincoln Bush. The combination train/ferry terminal is scheduled for a major rehabilitation with Public Works money. The trainsheds, designed by Bush and now known as Bush sheds, were a major innovation. They rest on a simple column-and-girder framing, have a narrow smoke slot, and did not require falsework during erection; all advantages over the then-traditional three-hinge arch balloon shed. [The site was visited during the SIA's First Annual Conference, April 1972.]

Next stop was Hoboken's Keuffel & Esser Building, constructed in 1906 in reinforced concrete [SIAN July/Sep. 75:6]. In 1974-75 the building was adapted by architects Beyer-Blinder-Belle for use as apartments. The adaptation exploited the features of the structure and retained a major city landmark.

On to Jersey City for a stop at the Central RR of N.J. Terminal, now undergoing restoration as part of the State's Liberty Park Project. The terminal, built in 1889 with an expansion in 1913-14, was one of seven fully-developed marine passenger terminals on the Harbor. As at Hoboken, there is a double-level ferry concourse and in the 1913-14 expansion Bush added his patented sheds. This terminal, within shouting distance of Ellis Island, was the major West-Shore destination of the millions of immigrants who poured into this country in the late-19th and early 20thCs.

Lunch was taken on the *Binghamton*, a 1905 ferry now a restaurant. It plied the Hudson between Hoboken and N.Y.C. until 1967. Its Scotch boilers and compound engines are intact, but surrounded by fish tanks and plants.

Near the *Binghamton* in Edgewater is the Alcoa Edgewater Works. This enormous complex, now vacant, was one of the nation's largest aluminum works. In 1914 the U.S. Aluminum Co.

drafted plans for a major complex and by 1920, 72% of the plant (765,000 sq. ft.) had been constructed. The Turner Construction Co. of N.Y., designer and builder, used a pioneering system of reinforced-concrete construction with mushroom columns and dropped-panel flooring. The main building, 160-ft. high and painted silver-grey to look like aluminum, is one of the shore's major landmarks.

Final stop was the Hackensack Water Co. plant in Weehawken [SIAN Sept. 77], object of a preservation struggle at this time. Preservationists are being pictured as cruel, insensitive creatures since housing for the elderly is proposed for the site after demolition of the plant. *D.V.A.*

IA DEVELOPMENTS ON THE CONTINENT

A flood of European publications recently received attests to an active and growing concern with IA on the European continent—some on the part of countries heretofore not regarded as particularly deeply involved.

ITALY. *Archeologia Industriale* is published at Milan and edited by Paolo Caputo and Ornella Selvafolta, both architects connected with the Milan Polytechnic. (Drs Caputo and Selvafolta spoke on "IA in Italy" at the SIA Marthas Vineyard Symposium in October 1977. Bulletins #1 & #2 (March and July 1977) give impressive evidence of the varied activities in the field in Italy, and contain as well general articles on the nature of the new discipline. [See SIAN Sept/Nov. 76:3.]

The Italian SIA was officially organized in July 1977 as an outgrowth of the "Center for Documentation & Research: Industrial Archeology," founded in June 1976 by Dr Caputo and a group of other scholars. The Center's first year of activity culminated in a conference in Milan last June, at which Dianne Newell was a speaker.

Among the projects reported in the two issues of *AI* are: a joint study by researchers from the Milan Polytechnic and Penn State Univ. of an 18thC silk complex at San Leucio that resulted in an impressive report and an exhibition held in conjunction with the Milan meeting; joint studies of 18th and 19thC IA in Milan by students & faculties of Milan Polytechnic and the Univ. of Milan; a proposal for the re-use of the large stock-yards complex at Bologna based on studies by the engineering students and faculty of the Univ. of Bologna; and a proposal for an "in situ" IA museum at Trezzo-Cassano along the River Adda (Lombardi, N. Italy), where textile manufacturing flourished for 100 years.

BELGIUM. Most of the reportage on Belgian IA activities is in the Walloon dialect and so, regrettably, inaccessible to our translators. They observe, however, that the monthly *Bouwkundig Erfgoed in Vlaanderen* is an official Ministry of Culture journal on IA and related matters.

A prime mover in Belgian IA clearly is Adrian Linters [SIA] of the ministry of Culture in Brussels, who is author of an article (in French) on "IA & the Museum in Flanders." He outlines the existing museum resources and notes "...growing initiatives in setting up museums representing local industries in their original settings [for example]: at Genk, a group is trying to get the administration building of a defunct mining company for a mining museum; at Hasselt another group has been trying since 1974 to transform the 1st surviving complete gin distillery into a gin museum." Linters urges systematic organization of IA collections before it is too late. This article is a helpful guide to Belgian IA and museum collections.

FRANCE. The *Bulletin* of L'Assn. Française des Amis des Moulins (French Assn. of the Friends of Mills) is published to serve the needs of its members, whose aim is the protection, stabilization, and restoration of old water and wind mills. The issue at hand (July-Dec. 1976) is devoted to windmills, with articles on the mills in southern Finistère (Brittany); individual mills of special interest elsewhere (all with detailed drawings from the "Center of Research on Historical Monuments"); and the rebuilt Don Quixote Mills in Spain that are to be part of an Intl. Youth Center.

AFAM president Gaucheron has visited the mill in the complex assigned to France to advise on setting up a mill museum in the structure. Finally, and perhaps most interesting, is an article on a former mill-stone manufacturing center ("French buhrs") at Cinq-Mars-la-Pile, on the Loire, down-river from Tours. This journal would be of great interest to the mill specialist and the less technical articles of interest to the lay reader.

SWITZERLAND. *Industriearchäologie—Zeitschrift für Technikgeschichte* (IA—The Journal for the History of Technology) is published quarterly in Brugg by the Schweizerischen Gesellschaft Pro Technorama (Swiss Assn. for Technorama). The inaugural issue (March 1977) deals with the activities of the SGPT and the general status of IA in the nation, in articles by SGPT Pres. Jules Peter and Business Mgr. A. Frischknecht.

The SGPT and a predecessor group have for the past 30 years been collecting objects representative of Swiss industry with the intention (and hope) of establishing a Swiss Museum of Technology (Technorama). The group has been lobbying the federal government for a subsidy, arguing that so highly industrialized a nation can hardly afford to be without one.

The stored collections—consisting now of over 6000 objects—are to be used also as the basis of a research foundation in the history of technology and industry. Interestingly, excluded from the collecting and general activities of SGPT are the artifacts of the transportation, timekeeping, telecommunications, and defense-technology industries, as the realms of already-established museums. Otherwise, nearly every other aspect of Swiss technology is represented in the collections, which span a period from 1800 to nearly the present.

Articles in succeeding issues of *IZT* cover a wide variety of Swiss IA, including the description of an early-19thC spinning mill in Turgi that pioneered in hydroelectric generation. Last Sept's issue (No. 3) is devoted principally to the IA of the Swiss chemical industry, an area to which scant attention has been devoted by the English-speaking IA community.

Despite their longstanding concern with the "museum-preservable" archeology of their industrial heritage, SGPT's guiding spirits are unswerving in their assertion that in building national understanding of that heritage, museums are only second best to the actual preservation of industrial monuments *in situ*.

The feeling pervades the articles in *IZT* that attitudes toward IA and all it stands for definitely are improving in Switzerland, demonstrated by a generally increasing activity in many areas of the field: local and national designation of industrial landmarks; inventorying; documentation; and some preservation. There is even a cry for amateurs to take hold where they can, and for the appointment of technical-monuments officers at various levels. Switzerland clearly is on its way. *K.A.L. and I.T.*

Fuller details on all of the publications mentioned are available from SIA HQ.

PUBLICATIONS OF INTEREST

Compiled by Robert M. Frame III and Susan R. Queripel, Minnesota Historical Society.

R. Baker, *New & Improved: Inventors & Inventions that have Changed the World*. London: British Museum Pubs., 1976. 168 pp. £3.50 (Rev.: *Technology & Culture*, Oct. 1977.)

Arthur M. Bixby, Sr., *The Norfolk & Western's Roanoke Shop & Its Locomotives*. In *RR History*, Autumn 1977, pp. 20-37. Major builder of elegant steam locomotives, from private start in 1882 to 1953.

C.W. Bohi & H.R. Grant, *The Standardized Ry. Station in Saskatchewan: the Case of the Canadian National System*. In *Saskatchewan History*, Autumn, 1976, Sask. Archives Office, Univ. of Sask., Saskatoon S70 WDN.

Ruth Brandon, *A Capitalist Romance: Singer & the Sewing Machine in Foreign Markets, 1854-1920*. NY: Arno Press, 1976.

390 pp., illus. \$30. Good bit on the technology of satellite mfr. (Rev.: *Technology & Culture*, Oct. 1977.)

George D. Bryant [SIA], **Industrial Archeology of the Cold Storage Era: an Interview with George Howard**. In *Provincetown 250 Years, 1727-1977*, pp. 5-8, 51-63, 73-75. Illus. (P'town Hist. Assn., Box 552, P'town, MA 02657). 1977. Cold storage facilities on Cape Cod. Howard was "the last stationary engineer to operate a cold storage facility on the Lower Cape."

_____, **The Port of Provincetown 1776-1900**, In *29th Annual Blessing of the Fleet, June 25-27, 1976*, 13 pp., illus. \$2. Avail: PHA, as above.

Richard Bowman Cohen, **Once There Was Light**. In *Virginia Cavalcade*, Summer 1977, pp. 5-19. History of Virginia's lighthouses since the 18thC.

T. Allan Comp & Isabel T. Hill [both SIA], **Reuse of Industrial Buildings**. In *11593 (Supplement)*, Oct. 1977. (Office of Archeology & Historic Pres., Natl. Park Service, Washington, D.C. 20240). 6 pp., illus. Brief description of HAER-sponsored projects in Lynchburg VA; Winston-Salem, NC; Columbus GA: on feasibility of reuse of historic industrial buildings.

Carl W. Condit [SIA], **The Pioneer Stage of Railroad Electrification**. In (forming) Part 7, Vol. 67, *American Philosophical Soc. Trans.* (Independence Sq., Phila., PA 19106.) 45 pp. \$6. The technical background, 1895-97, covering the B&O project and the early branch-lines of the NH and Penna. RRs; and the period 1897-1905: the European work and further U.S. developments, all leading up to the period of the New Haven's pioneer main-line electrification project of 1907. A superb technical-historical account.

Neil Cossons [SIA] and Harry Sowden, **Ironbridge, Landscape of Industry**. London: Cassel & Collier (35 Red Lion Sq. WC1R4SG), 1977. 160 pp. £15. Prof. illus., incl. nearly 20 color plates. Exquisite.

C. Lyle Cummins, Jr., **Internal Fire**. Lake Oswego, OR: Carnot Press, 1976. 351 pp. \$19. A good, general history of the internal combustion engine to 1900. (Rev.: *Technology & Culture*, Oct. 1977.)

Edward P. Duggan, **Machines, Markets, and Labor: The Carriage and Wagon Industry in Late-19thC Cincinnati**. In *Business History Review*, Autumn 1977, pp. 306-307.

C. Hamilton Ellis, **Railway Art**. Boston: N.Y. Graphic Society, 1977. (In U.K.: London: Ash & Grant, Ltd.) 144 pp., heavily illus. \$10 (paper). All aspects of the RR in both graphic & fine art, nearly to the present. Some color. Really excellent.

Manuel Moreno Friginals, **The Sugarmill: The Socioeconomic Complex of Sugar in Cuba**. NY & London: Monthly Review Press, 1976. 182 pp. \$23.50. Good bit on the technology. (Rev.: *Technology & Culture*, October 1977.)

Richard G. Garriety, **Canal Boatman—My Life on Upstate Waterways**. NY: Syracuse Univ. Press, 1978. 240 pp., 60 photos. \$11.95. Autobiographical account of Garrity's career on New York State Canals 1918-70.

Carl Gersuny, **Work Injuries And Adversary Processes In Two New England Textile Mills**. (Late 19thC.) In *Business History Review*, Autumn 1977, pp. 324-325.

Geoffrey Giglierano, **The City and the System: Developing a Municipal Service 1800-1915**. In *Cincinnati Historical Society Bulletin*, Winter 1977, pp. 223-47, illus. The city's sewerage system.

Ralph D. Gray, **National Waterway: A History of the Chesapeake and Delaware Canal, 1769-1965**. Urbana, IL: Univ. of Illinois Press, 1967. 290 pp. \$8.95.

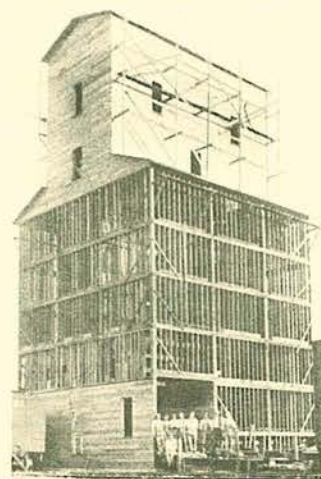
Archie Green [SIA], **Only a miner: Studies in Recorded Coal-Mining Songs**. Urbana, IL: Univ. of Illinois Press, 1972. 504 pp., illus. \$12.50 A "mosaic of the lives and ghastly struggles of American coal miners and their families."

Robert L. Schuyler [SIA] (Ed.), **Historical Archaeology, A Guide to Substantive & Theoretical Contributions**. Farmingdale, NY (120 Marine St., 11735): Baywood Publ. Co., 1978. \$15, paper. The first general source book in the field, collecting in one volume widely scattered items representing all aspects of the discipline. In 35 chapters reprints the most important classics in the field, gives full site reports for eastern & western N. America, presents a series of well-known statements on the how & why of HA, and contains a clear indication of future research and trends within the discipline. While fairly light on IA (a chapter by R.A. Buchanan [SIA]: "IA: Retrospect & Prospect"), an extremely worthwhile work, placing the subject in the broad context. NB: royalties are to be distributed to certain societies in the field, including SIA.

Robert B. Riley, **Grain Elevators: Symbols of Time, Place & Honest Building**. In *AIA Journal*, Nov. 1977, pp. 50-55 + cover. Few industrial structures have taken on such a variety of forms, set out in so many different structural systems, all of them interesting and appealing. Marvelous examination of the culture and technology, fully illus. with historic and recent photographs.

Robert L. Schuyler [SIA], **Historical Archaeology as an Integral Part of the Anthropology Curriculum**. In *Teaching and Training in American Archaeology: a survey of programs and philosophies*, Univ. Museum Studies no. 10. Carbondale: Univ. Museum & Art Galleries, Southern Ill. Univ., 1977. pp. 84-99.

Anton Sipman, **Molentekeningen**. DeWalburg Pers, Zaadmarkt 84-86, Zutphen, Netherlands. Dfl. 900 (approx. \$400.) A super-quality portfolio of 75 drawings of 35 Dutch windmills (14 color perspectives; 1 b/w perspective; 60 b/w scale). Accompanied by book with technical descriptions of each mill in Dutch, with glossary in English and German. Drawings: 20 x 28 ins. Edn. limited to 500. (Copies of English description avail. from Ed. for stamped envelope.)



Balloon-frame elevator under construction, c1905. *Feed & Grain Journal*.

REVIEW

A journal, because it contains such a variety of material and because its editors are able to enforce and periodically reassess standards of scholarship, has at least as much, if not more, potential impact on research and overall goals within various disciplines as do single scholarly works. Seldom, however, will an entire journal undergo the sort of critical review given to books. The SIA has produced three issues of its journal, *IA*. Below are reviewed two new journals publishing material relevant to, although not directly concerned with *IA*.

Social Science History, journal of the Social Science History Assn. Pittsburgh. Vol. 1, Fall, 1976- Quarterly. 100 pp. aver. Free with SSHA membership (Students \$8; faculty \$15; charter \$100; library \$20). Write: Jerome M. Clubb, Center for Political Studies, Box 1248, Univ. of Mich., Ann Arbor 48106.

History Workshop, a journal of socialist historians. London. Issue 1, Spring 1976- Semiannual. 300 pp. aver. Annual subscription (2 issues) £5 for UK res., \$14 (US) others. Write: *HWJ*, PO Box 69, Oxford, OX27XA. Back issues \$8 (US), from Pluto Press, Unit 10, Spencer Ct., 7 Chalot Rd., London, NW1 8LH.

Iasts will be interested in *Social Science History* primarily for its methodological, interdisciplinary perspective. The SSHA formed in 1974 to improve the quality of historical explanation by

encouraging the selective use and adoption in teaching and in research of relevant theories and methods from social science disciplines. Its editors claim to provide a forum for research that attempts generalizations of some breadth verified by systematic examination of the relevant evidence and supported by quantitative analysis when appropriate. They particularly welcome contributions to the development of theory and techniques which, although firmly centered in particular social science disciplines, can provide a genuine interdisciplinary focus in approaching the historical dimension.

Five numbers of *SSH* have appeared since 1976; the result so far is largely disappointing. This is due perhaps in part to journal "growing" pains and IAs can more than sympathize with that. But it may also have intellectual roots. Economists and social and political historians—many very eminent in the field—seem to dominate the ranks of this organization which, judging from the articles appearing in the journal, is not nearly as "interdisciplinary" or as "scientific" as it hopes to be. It appears more to be a catch-all journal destined to be simply one more place where academics can get something published.

That is not to say that nothing innovative is taking place here or that no good pieces are finding their way into *SSH*'s pages; but what should set this historical journal apart from many others, and what should excite IAs about it, is the rationale set out by its editors—that of advancing the principle of systematic history. The journal, for one, lacks a critical dimension. Reviews of books and articles are virtually absent. It seems reasonable to assume, however, that the articles themselves should reflect the Assn's. position, and that articles and editorials should routinely appear that deal specifically with establishing standards, and exposing the problems and even the abuses of systematic history. Two articles, "The Agenda for 'Social Science History'" (J. Morgan Kousser, 1 [1977]: 392-400), and "Collective Biography and the Progressive Movement: The 'Status Revolution' Revisited" (Jerome M. Clubb and Howard W. Allen, 1 [1977]: 518-34) are notable exceptions to the general criticism. These authors tackle methodological issues, clearly advancing the field as a result. There should be more.

Too many articles appear that are not even good narrative history, let alone scientific history. A case in point is an article selected for mention here because it enjoys lead-article status, its author is a prominent U.S. historian, and the subject matter could be of interest to IAs. Thomas C. Cochran's brilliant study *Railroad Leaders* (1953) continues as a model for historical investigators today. His *SSH* work-in-progress article, "Early Industrialization in the Delaware and Susquehanna River Areas: A Regional Analysis" (1 [1977]: 283-306), is, especially in this particular setting, unfortunate. Aside from the curious treatment of methodological issues that occurs at the beginning; apart from the tortuous geographical descriptions that would have been much more clearly and sensibly made using a map, this essay contains such undocumented, questionable, and implicitly causal statements as the following: "New families needed homes and growing towns or cities needed buildings. *Probably almost all substantial manufacturers in the Middle-State regions had to erect their own plants, whereas Peter Mathias estimates that most British industrialists moved into buildings that had previously been in use. The first modern iron works in Belgium, for example, occupied the former Bishop's place at Seraing* [reviewer's emphasis]. Hence, building construction was the major [American] consumer of fixed capital, the major employer of non-agricultural labor in most areas, and a continuous supplier on the money markets. . . ." (p. 295). Admittedly one of the more controversial statements in the article (one wonders how British IAs are going to take the news) it nevertheless is representative of a host of others.

What is the point here? Well, this journal, like *IA*, is refereed. Why should an article appear that strays so far from the journal's goals, and occupy such a prominent position? The slackening of thoughtful publication criteria for the sake of promoting the work of its prominent members or for any other reason in the end does a disservice to the field. Any society and its editorial board is vulnerable to that. The danger is that, in the absence of standards, it is possible that the goals of an organization will be defined by

numerous articles paying lip service to the field simply to justify inclusion in the publications and programs of that society.

It is fairly common practice in professional associations, especially new ones, to feature the work of well-known scholars or to accept pretty much whatever is offered, in order to get established. A standard has to be established *and maintained*, however, and it should apply to everyone. The *SIA* has from its inception conscientiously favored first-rate work over first-rate reputations, although honest voices will remind us that our modest success in this regard may be due largely to the scarcity of "scholarly reputations" within our membership. It is just possible, though, that the real sign of health in any society lies not merely in the status of its members, or in its bare ability to survive, but, rather, in its ability to encourage constant re-evaluation of how well its programs match up to standards set for achieving its goals.

As it turns out, it is the experience of this association, rather than the information contained in the pages of its journal, that says the most to the *SIA*.

History Workshop seems a more genuinely innovative and likely forum in which to discuss *IA*. This journal emerges from the history workshops held at Ruskin College, Oxford, over the past ten years. Concerned with bringing the boundaries of history closer to people's lives, it addresses itself to the fundamental elements of social life—work, material culture, school, &c. The journal is dedicated to coordinate those themes with an overall view of capitalism as a historical phenomenon, both as a mode of production and as a system of social relations. Moreover, it intends offering practical help to working historians, making history a more democratic activity and urgent concern—hence, its focus on how to "do" history. Covered are the use of non-written sources, reviews of industrial museums (see, Brian Tinder, "Industrial Conservation and Industrial History: Reflections on the Iron Bridge Gorge Museum" 2 [1976]: 171-177), historical films, and archives of popular culture. The editors encourage articles dealing with the workings, not just the results, of historical inquiry, and those that encourage practical criticism in readers.

It is really the goals, more than the means to achieve them, that sets this journal apart. "We would like the Journal to be used, not just read; to be a place where difficulties are acknowledged, problems defined as well as solved, sources examined for their bias and limitations, subjects opened up rather than closed."

All indications from the four issues thus far are that these goals are being successfully met. A number of articles of direct *IA* interest have appeared. Two are detailed below, which present challenges important to IAs.

Ralph Samuel's "Local History and Oral History" (1 [1976]: 191-208), deals with the recent popularity with local historians of exploiting "visual evidence" in order to convey a more immediate sense of place. He cautions that this work is almost too rewarding, so that historians' attentions are completely diverted from People to Place. IAs, he says, lovingly reconstruct the workplace, "but the workers themselves can remain mere shadows, dwarfed by the physical setting." (p. 195). Paul Thompson's brief review of the work of an architectural historian, "Mark Girouard and Architectural History" (2 [1976]: 215-17), laments the "lack of help from architectural history" in developing an understanding of the social context of buildings. "For most of us, the buildings and shapes of the streets which we see every day are much more direct evidence of the past. . . than any documents can ever be." (p. 215). The pioneer studies of Girouard and the enthusiasms of the Victorian Society and industrial archeology are, to him, exceptions to this criticism.

One problem with the treatment of *IA* in *History Workshop* seems to be the implicit notion that *IA* is merely descriptive and important only to local history. The issue of its potential as a scholarly discipline is not raised. This should come as no surprise, since it is an issue barely raised among IAs themselves. In our search for methodological perspectives with which to study *IA* material and provide reliable explanations about what happened in the past, we clearly have as much to contribute to this journal as we have to learn from it. The exchange promises to be a happy one. Dianne Newell, Univ. of Western Ontario.