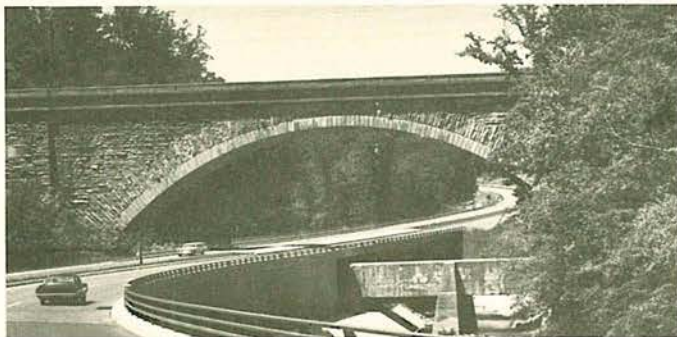


# SOCIETY FOR INDUSTRIAL ARCHEOLOGY

## NEWSLETTER

Volume Five Number 2

March 1976



*Commission of Fine Arts photograph by J. Alexander.*

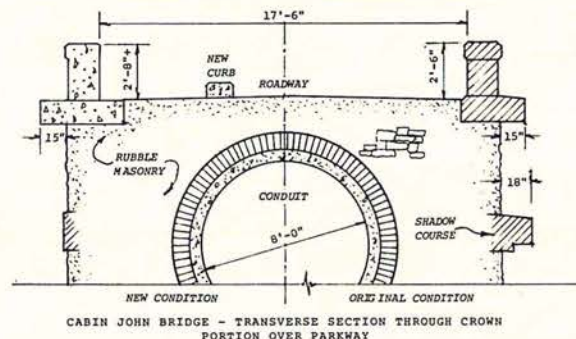
### CABIN JOHN BRIDGE PARAPETS TO BE REWORKED

#### A TOLERABLE COMPROMISE?

The Cabin John Bridge or Aqueduct, one of the most important IA structures by virtue of its containing the longest clear-span stone-masonry arch span in N.A.—2nd longest in the world—has been the subject of considerable controversy during the past year or so, the issue apparently now resolved. Whether or not the solution can be regarded as wholly satisfactory from the historic preservation standpoint is not absolutely clear, however.

The span was built 1858-63 as part of the Washington Aqueduct, designed and constructed by Capt Montgomery C. Meigs to carry Potomac River water c12 miles from Great Falls, Md., providing the City of Washington with its first public water supply. (It still is in full use as originally constructed, the capacity doubled to 200 million gallons/day by a second, parallel aqueduct of 1926.) Flow was entirely by gravity, all stream valleys crossed by stone-masonry culverts and bridges. The greatest of those was that over Cabin John Creek [SIAN 3:3:2], a hollow-spandrel segmental arch of 220-ft span with a rise of 57 ft. The arch ring is of cut Quincy (Mass.) granite, the remainder of local gray and red Seneca sandstone. As are all the Aqueduct's original structures, the Bridge is of a high order of architectural refinement, designed by one of Meigs' assistants, Arthur Rives, a Frenchman classically trained at the Ecole de Ponts & Chausees.

The embellishment was subtle, though, consisting principally of a shadow course above the arch ring, projecting 18 in., and a second, projecting 15 in., formed by the base course of a red Seneca-stone parapet added c1870 when the deck was made into a public road. The shadow lines projected by these courses enormously enhanced the bridge's appearance and general massive effect. Certain ledges of the nearby Seneca quarry, unfortunately, produced a porous stone that in time tended to spall, many of the blocks in the lower shadow course and the parapet being of this material. (There have been problems with this in many of Washington's notable Seneca-



CABIN JOHN BRIDGE - TRANSVERSE SECTION THROUGH CROWN PORTION OVER PARKWAY

*Based on Dept. of the Army, Corps of Engineers drawings.*

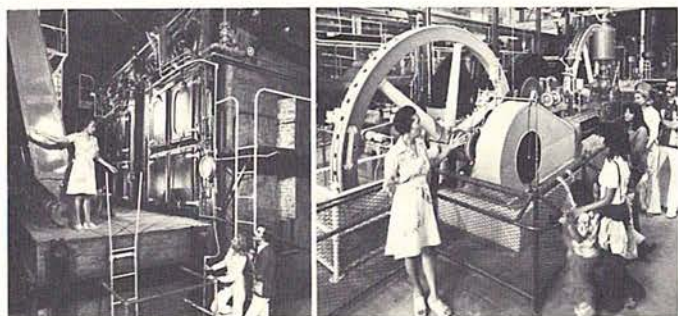
stone buildings such as the Smithsonian Institution Building and Renwick (originally Corcoran) Gallery.) The gradual spalling had over the years caused some stone to fall away—a mere visual misfortune until the construction c1967 of an Interstate leg passing beneath the bridge—itsself an aesthetic disaster totally destroying the bridge's bucolic setting. The dropping of one particularly hefty chunk of stone onto the road below was enough to send panic through the U.S. Army Corps of Engineers, operator and custodian of the entire Aqueduct, who promptly sliced off flush with the surface most of the lower shadow course on both sides of the bridge. Bad enough. Then, when largish bits of the parapet cap stones began to rain down, the worst sections of the offending parapet were removed entirely and the bridge closed to automobile traffic, sore inconveniencing the local peoples.

The Corps proposed several replacement parapet designs in the couple of years intervening, all of which, however, would have presented an appearance vastly different from the original. After strong protest from various segments of the local, state and national preservation communities, a scheme has been evolved that seems agreeable to all, although a considerable aesthetic compromise. The three original parapet elements—projecting base, intermediate block, and coping—will be replaced with two elements of pre-cast reinforced concrete, dyed to match more or less the Seneca-stone color. The Corps claims dead safety and permanence, and near total visual imitation of the original, at least when seen from below. The unconvinced point out that: 1) the most vivid concrete dyes cannot possibly match the richness of Seneca stone; and 2) no concrete dye yet made by man is chromatically stable, particularly the reds, so that fading would be inevitable. Further, the lower shadow course stones are not to be restored, even in concrete.

Still, the general feeling is that better the concrete solution, feeble as it may be, than nothing, in restoring at least a semblance of the original appearance. Further, it has been noted that nothing in the scheme is irreversible, and that theoretically (if not economically) it would be feasible at some later date to reopen the Seneca quarry and restore absolutely in stone the parapet and shadow course.



## KAHUKU SUGAR MILL RESTORED



Restored boilers (left) and two of the heavy Corliss-type steam engines driving the crushing rolls, that in the foreground a Nordberg with variable-speed drive.

The Hawaiian sugar industry—greatest economic and social force in the islands' history—is paid well-deserved tribute at an impressive new museum opened this spring at the revitalized Kahuku Sugar Mill. The mill, incorporated in 1890, just one year following the arrival of rail connection with Honolulu, was erected by pioneer businessmen alongside their huge, 17-mile-long sugar plantation. Capacity of the cane crushing roller mills was 50 tons per hour. Raw sugar was shipped to a refinery in Crockett, Calif., near San Francisco. The mill eventually proved uneconomical, primarily because of the high

cost of shipping 40 miles to the port at Honolulu, and in December 1971, was closed.

Five years ago, then, the sugar mill was scheduled for demolition, but a local developer, along with heirs of the estate, has found for it a new use as a "working museum" dedicated to the technological and social history of the Hawaiian sugar industry. Not only has an important new life been found for the historic old mill, but employment has been provided for many former employees.

Power and crushing machinery is refurbished and operable, only now all is driven by electric motors rather than steam. Although the mill will no longer actually produce sugar, its processes will be simulated authentically. Along with a mill tour, developers have provided an interpretative center and a multi-screen documentary film, using much historical footage, and several architecturally compatible merchandise and refreshment areas.

Developer of the mill—Blackfield Hawaii Corp.—was a leading residential and resort developer that in 1969 was acquired by Pacific Lighting Corp. of the S. Calif Gas Co. Restoration design was by E. M. Brownlee; tour concept, show, and character, by The Liljenwall Group.

Located on the Island of Oahu's north shore, 1 hour's drive from Honolulu. Hours 10-6, tours to 4 pm. Admission. *Dianne Newell, Univ. of Western Ontario.*

## BLOW-IN AT TANNEHILL: UPDATE



Bringing up to the minute the word on this momentous, portentous event, scheduled for 19 Sept [SIAN 4:6], all is moving ahead with vigor. James R. Bennett, Chairman of Alabama's Tannehill Furnace & Foundry Commn, reports that the attendant ceremony will commence at 2:00 PM (CDT) with brief remarks by an SIA representative, Gov. Wallace, and others, the *tapping of the furnace* to occur at c3:00. Several thousand spectators are looked for, who will witness the first run of cold-blast, charcoal pig iron from this furnace since 1865, and what might well be the first such run from a stone-built blast furnace in N.A. in the 20thC [See also SIAN 1:6:1].

The furnace stack is fully restored as is the casting shed and the charging bridge. The blast pipes and tuyeres now are being reconstructed. Unfortunately, by the time of the blow-in the blast engine, originally water powered, will not have been reconstructed, the blast air temporarily provided by modern means. Charging will start about midnight previous. The event is under the technical supervision of Prof Ray Farabee, emeritus head of Univ of Alabama's Metallurgy Dept, the work force to be provided by U.S. Steel's Fairfield Works. The 5-6 ton heat will be run into sand molds producing 3 or 4 Confederate six-pound cannon and a number of balls and small souvenir pigs. All are welcome, to what must be regarded as the 1A event of our time. The restoration and that of the adjacent Nos. 2 & 3 furnaces of 1863 is being funded by the State, the U.S. Dept of the Interior, and the Bicentennial Admin. Tannehill State Park, between Tuscaloosa & Bessemer, 25 miles SW of Birmingham, near Bucksville and McCalla, Ala.

## SITES AND STRUCTURES

*Dianne Newell.*

### CANALS

**SPANNING THE MIDDLESEX.** Under the watchful eye of the Middlesex Canal Assn. the value of this historic waterway (1793-1853) has become a force to contend with. Only vestiges of the 29-mile course remain visible. One crumbling structure—the central pier of the Shawsheen River Aqueduct [SIAN Conf, 1976]—has been assured of preservation, by a grant of \$25,000 last December from the nearby town of Billerica. The canal, a Nat'l Historic Civil Eng. Landmark, also has received special treatment by the Mass. Dept. of Public Works. Since relocation of Rt. 129 near Wilmington would have caused obliteration of the course at that point, MDPW decided to restore, in consultation with the Assn., a 1,400-ft. section of the canal and to design and erect a historically compatible, yet economical, bridging structure over the waterway. To accomplish this a corrugated metal tube of approx. 30 ft. diam., with a 14-ft. rise, was employed. Facings and wingwalls were finished with native stone to mask the modern culvert.

**JAMES RIVER & KANAWHA.** Preserved at 12th & Byrd Sts., Richmond, Va. are two double locks: Nos. 4 & 5 (1854) of the Tidewater Connection, and nearby, the old 13th St. bridge (1860) and the Haxall Flume. The locks have been preserved privately by the Reynolds Metals Co. as part of the design of their plant site.

**THE ERIE** last year celebrated its sesquicentennial in a grand manner. A Canal Study Institute was held at the Canal Museum, Syracuse, in June-July. Its theme: "Canals for a Nation: An Era & its Impact". Thomas F. Hahn [SIA] served on its faculty.

October 4 witnessed the formal celebration at DeWitt of the Canal and dedication of a new canal interpretive center, built along the towpath of both the original and the enlarged (1840s) Erie.

Later that month, the Canal Museum hosted the fall meeting of the Council for North East Historical Archeology. The theme was, naturally, canals.

**CANAL FULTON.** Walking tours of town & rides on replicated 60-ft. canal barge *St. Helena II*, Ohio & Erie Canal



[SIAN 3:1:4]. Tues-Sun. Info: Canal Fulton Heritage Society, Box 607, Canal Fulton, Ohio 44614. (216) 854-3808.



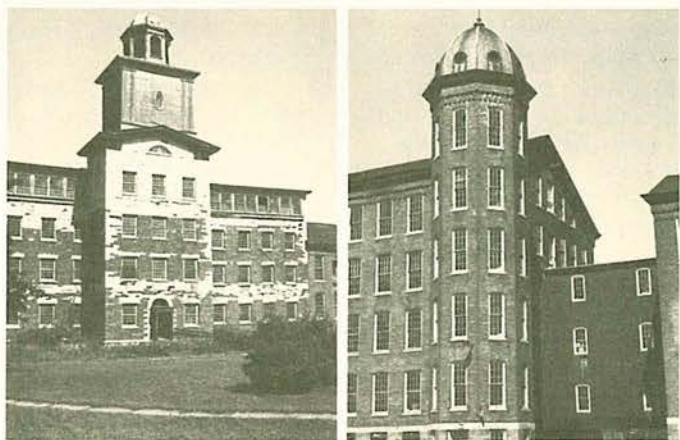
William E. Trout photograph.

### AN ENGINEERING DRAWING IN STONE

This scale drawing of the Fredericksburg Water Power Co. Dam (1854-55) is on a 2 x 3-ft stone tablet attached to the S. abutment of Embrey Dam (1930s) which superseded it, on the Rappahannock River just above Fredericksburg, Va. It is a cross-section (upstream on the left) showing bedrock, timbering, watertight planking on the outside, and hollow spaces probably to be filled with loose stone. According to the newspapers the engineer of this 20-ft high crib dam was "Mr. John Chase, who built the famous dam across the Connecticut at Hadley Falls," but a Fredericksburg map in the City Hall, with details of the lock and dam including the same section, notes that the engineers were Stewart Chase and Carter Braxton. Did they leave such tablets anywhere else? Are there any other scale drawings in stone in N.A.? To reach the stone, follow canal towpath from F'burg up to very far end of dam abutment. Thanks go to VEPCO for being so careful with it when the Embrey Dam was constructed. *Wm. E. Trout, III, American Canal Soc.*

### IN THE NATIONAL REGISTER

**NY IN THE NR.** It still happens that some states in the U.S. are maintaining far better records than others—quite regardless of the relative number of sites within their borders—of their IA placed in the Register. By this time we all should recognize that registration means quite a bit more than a psychological advantage—although that is a powerful factor—in making a site eligible for a variety of loans and other tangible preservation aids. N.Y., as reported by the *Newsletter* of the Preservation League of N.Y., placed in the N.R.: the United Traction Co. Office Bldg., Albany, a fine classical structure of 1899; the Erie Canal's Nine Mile Creek Aqueduct at Camillus, Onondaga Co., one of the great masonry/timber aqueducts of the canal's "Enlargement" in the mid-1840s; and the Middle Mills Historic Distr. in New York Mills, Oneida Co., containing a number of spectacular 19thC cotton mills. Go team.



Mills of c1850 and 1880, New York Mills, N.Y.

But on the other hand . . . just to let us know how she really stands on history in this, the Bicentennial year, N.Y. early in the year abolished the Office of State History as a means, reportedly, of saving \$100,000 annually. Shame.

**ALABAMA LANDMARKS** recently recorded in the Register include Boshell's Mill, sole 19thC sawmill-gristmill combination erected in Northern Ala. Original customer of the sawmill was the St Louis-San Francisco RR, while under construction. The complex was badly damaged by a fire recently—probably intentionally set.

**THE CALHOUN ST. BRIDGE** (1895), linking Trenton, N.J. and Morrisville, Pa., recently received designation. The iron span is a rare survivor of those built by the Phoenix Bridge Co., Phoenixville, Pa.; and had been threatened by plans for a 4-lane toll bridge proposed by the Delaware River Joint Toll Bridge Commn.

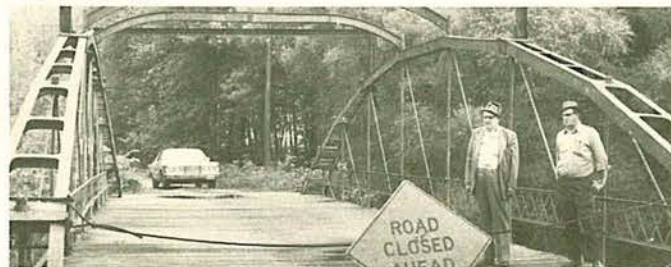
### LOST

**THE B & O RR's BLACKSMITH & FORGE SHOP** (c1870) was partially levelled in March by hurricane-force winds that swept through the Baltimore region. The shop, at Carey & Ramsay sts., abandoned since a 1962 fire, was part of the historic B & O Mount Clare shop complex [SIAN 3:3:1], visited during the SIA 4th Annual Conf., 1975.

**ACTUALLY, BLOWN UP.** The preservation of obsolete iron bridges is, admittedly, an arduous task [SIAN 4:6]. Many will fall, but it is hoped their demolition will not be cause for hilarity. The city of Charleston, W. Va. was not content simply to demolish their Kanawha River Bridge, a 700-ft. bow-string truss that had been replaced with a modern span. A local newspaper, the *Daily Mail*, had the poor taste to sponsor a contest in which the "prize" was detonation of a series of heavy-explosive charges on the span. And the winner did so, "with a push of a button, the flick of a lever, and a laugh," as thousands of spectators lined the river banks, and a high school band played Auld Lang Syne. Worse, the Associated Press coverage of the bizarre event was, of course, carried in a host of N. American newspapers, thus spreading word of this fun new way of eliminating old bridges.

### FOUND

**IN OHIO**, another cast- and wrought-iron bridge built on the patent of Squire Whipple. This one, built 1872 by the Coshocton Iron Works, is a 101-ft. span across Wills Creek on Linton Twp. Rd. 144. While county commissioners have decided to replace it, they are seeking ways to preserve the classic old span.



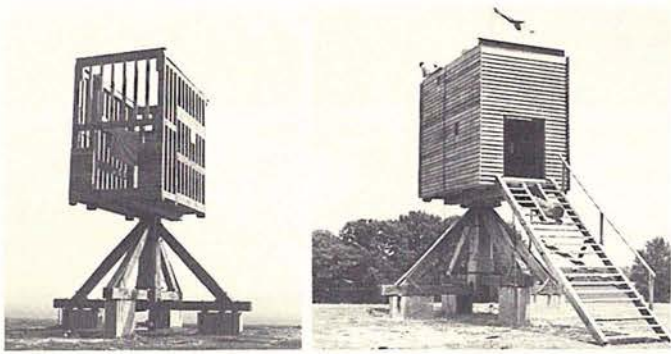
Columbus (Ohio) Dispatch photograph by Dave Mathews.

### MOVED

**A REMOTE AND THREATENED COVERED BRIDGE**, a 61-ft modified kingpost truss near Alexandria, Ala., has been moved by two concerned citizens to their private Nances Creek restoration project in Calhoun Co.

**MORE ON IMMIGRANT WINDMILLS.** Re the note on same, last SIAN (p 6), Volta Torrey [SIA], via *Old Mill News*, reports that a Danish mill of c1830 is to be brought from Jutland to Elk Horn, Shelby Co., Iowa shortly, via the St. Lawrence Seaway, Chicago, and motor truck. In addition, Everett S. Powers [SIA], VP of the Society for the Preservation of Old Mills, notes that presently being erected on the Flowerdew Hundred Farm, Hopewell, Va., is a post-type flour





*College of William & Mary photograph by Mike Siede.*

mill commemorating one on that site built in 1621, the first mill in English America. It will be considerably larger than the original, representing the state of mill technology c1750. The work is being done by eminent English millwright Derek Ogden, employing timbers brought from England.

### REBORN

**TROLLEYS.** For years smiles and titters have greeted prophecy that the trolley will come back. But it has. The present decade has been witness to the upgrading and expansion of trolley-system "hold outs" in several N.A. cities—exemplary are Pittsburgh [3rd Annual Conf., 1974] and Toronto [Fall Tour, 1975]. Recently a decision by the Greater Cleveland Regional Transp. Auth. to reduce fares and subsidize the system, pressed into daily runs between suburban Shaker Heights and the city, two vintage cars—one on loan from the Conn. Electric Ry. Museum, in Worthington. New trolleys, ordered to carry the expected increase in ridership, will take at least three years to manufacture.

Detroit, where trolleys have not been seen since 1960, is installing an entirely new trolley system, believing that the historical nature of the line will revitalize a sagging downtown economy. The cost, including cars, car barn, and installation of rails and overhead powerlines, is, at \$600,000, considered a bargain. Ironically, the cars, while U.S. built, had to be purchased in Lisbon, a city which, in turn, was anxious to unload the old cars in order to modernize its system.

Other trolley systems continue to operate in Boston, San Francisco, El Paso, and Philadelphia.

**MILLWORKERS' HOUSING (1916)** at the former Amoskeag (textile) Manufacturing Co., Manchester, N.H. [5th Annual Conf., 1976], is receiving new life at the hands of private and public bodies. Forty units of the brick row houses are being converted by area businessmen into a fashionable townhouse-style condominium complex, Amoskeag Terrace Townhouses. Bruce Elles, E & M Architects, Concord, is architect.

Meanwhile, the Manchester Housing Auth. has its own plans to acquire 50 units of row housing to resell to private developers, who will be instructed to refit them as rentals for moderate-income families. The historical integrity of the rows will be retained.

### ADAPTIVE USE

**THE WARKENTIN MILL (1879)**, Newton, Kansas, has been revitalized for mixed commercial use as the Old Mill Plaza. The

former grist mill was built by the Monarch Steam Mills and acquired in 1886 by Warkentin, a prominent Kansas entrepreneur and innovator in the use of roller (flour) milling. Although listed in the Nat'l Register, the long-abandoned structure had suffered a fire and was scheduled for demolition. In fact, demolition already had begun when Newton citizens, led by businessman Lloyd Smith, rescued it. Smith now uses a large portion of the renovated 30,000 sq ft. of space for his tool manufacturing firm. Restoration consultant is Charles L. Hall, Kansas State Univ., Manhattan.

Elsewhere in Kansas, in what is a welcomed reversal of trend, a plan to reuse the former Rock Island Depot and Union Station (1911-1914) properties in downtown Wichita has been undertaken by the city's urban renewal agency. New use will highlight the industries of historical importance to the state—agriculture and transportation: a large railroad museum and an outdoor farmers' market are planned.

**AIA AWARDS.** The American Inst. of Architects for the first time in the history of its awards program has presented special awards to architects for adaptive use schemes. The jury examined 58 projects under the new classification "Extended Use," selecting four for merit. Anderson Notter Assoc., Boston [SIA], better known for their many projects reusing industrial structures, was recognized for their rehabilitation of Boston's "Old" City Hall, 1865, into offices and a restaurant, and the Minneapolis firm Hiller Hanson Westerbeek Bell Inc. was given an award for their conversion of a massive Minneapolis granite, cast iron, and timber warehouse of 1865, long abandoned, half into a luxury hotel and half into office, shop, restaurant and public spaces, all known as Butler Square.

### THE MUSEUMS

*Elsa M. Bruton, Nat'l Museum of History & Technology*

**OLD STURBRIDGE VILLAGE** recently has acquired the



175-year-old Dresser Hill blacksmith shop and moved it from its old home in nearby Charlton, Mass. It will be restored to become a working exhibit in OSV's recreation of an early-19thC cotton mill community. Plans call for situating the shop next to the 1823 Phoenix Mill [SIAN 1:5:2], which will be the community's industrial hub. The Dresser shop is ideally suited to the role of repair facility for the mill equipment. Surviving in the shop, which was in use as a farm blacksmith shop until 1950, are an old beam drill (considered a unique survival), the brick forge, and the bellows.

**LUMBER CAMP LIFE** in the early days of American timbering will come alive in the **White Mountain Museum of Forest History** (off US 3 nr. Bethlehem, N.H.). [SIAN 4:4/5:2]. On the 300-acre site in the White Mountain Nat'l Forest, old equipment, including a steam railroad, will be in action. Also in the complex will be a research facility, with photo archives, indoor exhibits, and educational programs on forest use and management. Target date for completion of the main building and RR is summer 1978. Aid and ideas to Bill Mean, White Mountain Design Group, Center Harbor, N.H. 03226.

**THE LONDON BREWERY** at 150 Simcoe Street, London, Ont. demonstrates the state of the art of brewing c1828. Open daily noon to 4, 1 May through Labor Day; weekends, Labor Day through Thanksgiving.

*Continued p. 7.*





# SIA 1975 FALL TOUR

## TORONTO & HAMILTON—27 & 28 OCTOBER

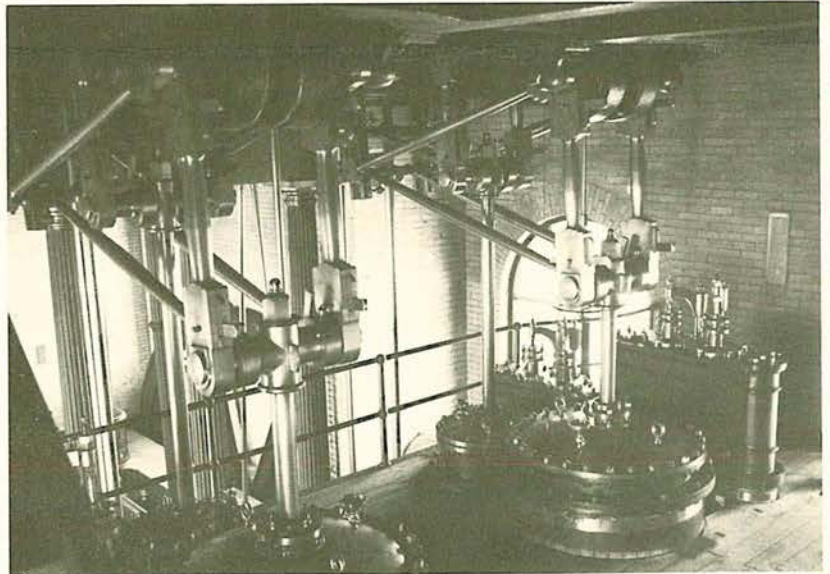
Dianne Newell, Univ. of Western Ontario & Kenneth Elder, Dept of Indian & Northern Affairs.

*It seems increasingly difficult to issue full supplements on SIA tours and conferences. More and more time is going into the work of organizing and publishing for these events; thus the burden of "follow-up" for organizers becomes formidable. It is important, however, to record in some way these events as historic SIA ventures. Moreover, it is necessary to acknowledge the hard work of those who consciously or unconsciously conserve IA sites, and, as well, those who contribute in so many ways to the success of SIA tours. It is to all of them that the SIA owes much of its vitality and rich diversity. Tour*

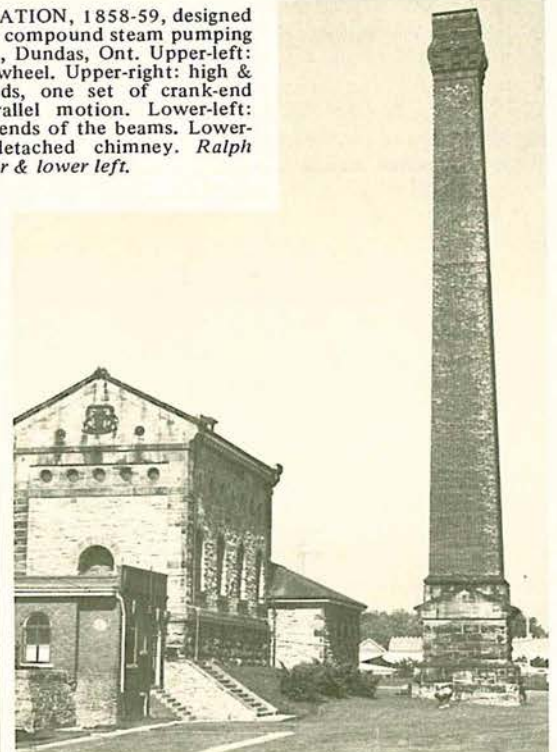
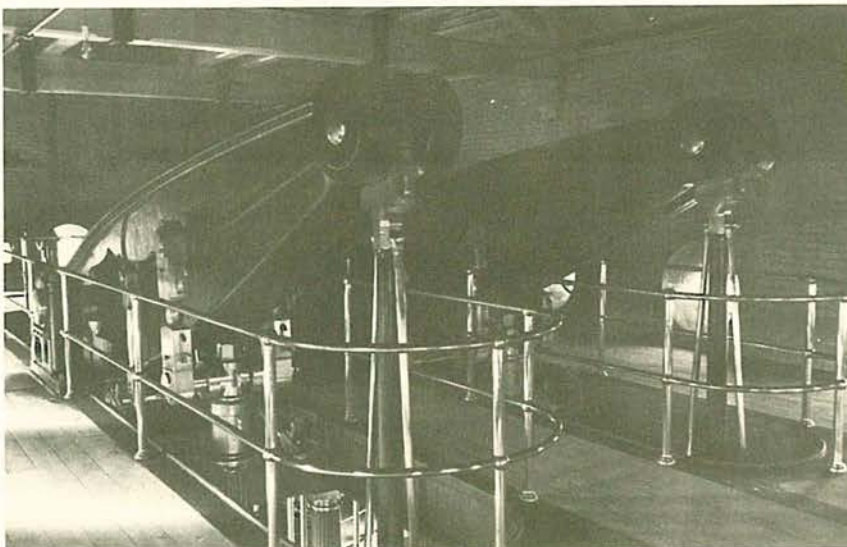
*coordinators were Dianne Newell & Kenneth Elder, who were provided enormous help, at all levels, by Wm. D. Naftel, Dept. of Indian & Northern Affairs and Ted Wickson, Toronto Transit Commn.*

The 2-day tour by 75 SIAers was launched with a Friday evening reception in Toronto hosted by the Ontario Heritage Foundation (OHF), Gov't of Ont. Premiered that night was the exhibit "Inventory of Industrial Landmarks in the City of Hamilton (1975)" prepared by the Cdn. Engineering Heritage Record. Silent films from the archives of the Toronto Transit Commn. (TTC) and a slide presentation by Wm. James on the Hamilton Pumping Station (1858-9) also were featured.

*Continued next page . . .*



HAMILTON PUMPING STATION, 1858-59, designed by Thomas C. Keefer, C.E., compound steam pumping engines by John Gartshore, Dundas, Ont. Upper-left: main columns and one flywheel. Upper-right: high & low pressure cylinder heads, one set of crank-end valves, and watt-type parallel motion. Lower-left: pump and connecting-rod ends of the beams. Lower-right: the station and detached chimney. Ralph Greenhill photographs upper & lower left.





## HAMILTON

Details of Saturday (Hamilton) and Sunday (Toronto) are found in the *Tour Notes*, underwritten by the OHF, Dianne Newell, Ed. [Avail. SIAN Ed, \$1]. Briefly, highlights of the



Hamilton sites included Blast Furnace "A", (1893), dwarfed by the enormous modern Stelco steel plant that surrounds it. This furnace launched the province's important steel industry and now is the oldest metal-built furnace surviving in Canada and one of the oldest left on the continent. Amazingly, it operated until 1968; now it is in poor condition and rumoured scheduled for demolition. The SIA is the first group to single out this landmark structure for a visit. This was followed by inspection of a run of beehive kilns and a vintage dry-press brick machine (demonstrated), at Hamilton Brick Ltd. (1907). Hosting the tour and refreshment stop at this sole survivor of the early Hamilton brick industry was the owner, W. K. Zinser, who insists upon maintaining traditions; a recently collapsed kiln was seen in the course of rebuilding—a relatively lost art—and an obsolete kiln has been converted into the company showroom. Lunch was provided by the City of Hamilton, at their historic "Dundurn Castle," the restored 1853+ Regency villa built for pioneer industrialist and railway promoter, Sir Allan MacNab.

In the afternoon were visits to two City of Hamilton landmarks: the magnificently preserved water pumping station (1858-9), and nearby Burlington Bay Lighthouse (1838). Both works saw surprisingly long service. The pumphouse remained in work until 1938 (on standby from 1910), and the light served until 1961. The pumping station was designed by Canada's leading hydraulic engineer, Thomas C. Keefer. The superb classical cut-stone engine and boiler house, detached stack, and wood storage shed, as well as the contemporary east end reservoir—now drained—all remain, virtually unaltered. In the pumphouse, the twin fore & aft condensing beam pumping units built by John Gartshore of Dundas, with soaring polished black steel supporting columns, 22-ton flywheels, and wood-encased condensers, are meticulously maintained by volunteers. This site is a unique survivor in N.A. Plans to open its doors to regular public visits and operate the pumping machinery on a demonstration basis, however, have raised the legitimate fears of many SIAers that the site will quickly be destroyed.

## TORONTO

The day ended with a cocktail hour hosted by the officers and staff of Natl Heritage Ltd., at their Toronto offices, located in a revitalized former shoe factory. Winners in a surprise draw for an NH-design reproduction fur-trade blanket were Charles and Kathryn Looney, who, appropriately, hold an unblemished SIA tour attendance record.

A Sunday morning walking tour of SE downtown Toronto, the city's first industrial district, concluded at the stunning Victorian distillery complex (most 1850s-70s), of the Gooderham & Worts Distilleries, Ltd. The site, relatively unchanged and containing much turn-of-the-century machinery and

equipment, continues in use as a distillery primarily because of heavy investment there in bonding warehouses. A number of early structures, such as G&W's massive maltings (1858)—which rarely survive—sit empty but maintained, because of a conservative management, long-time employees, and local preservationists. The remainder of the tour was by restored "Peter Witt" streetcars, of 1923 design, hired from the TTC. SIA member and rail enthusiast, Steve Monroe, undertook the complex task of mapping the route. Visits included a walk through the Toronto Terminal Ry. Co.'s (CNR & CPR) yards, with a visit to the manually-operated interlocking tower of 1930 at Bathurst St. Next was a stop for lunch and tour of the Toronto Historical Bd's "Marine Museum of Upper Canada," where curator Alan Howard treated all to a demonstration of Great Lakes steam whistles and inspection of the dry-berthed steam tug *Ned Hanlan* (1930). After a visit to the city's late-19thC industrial district in the SW, the tour climaxed at the High Level Pumping Station—still active—at which is preserved an obsolete vertical triple-expansion steam pumping engine by John Inglis of Toronto, installed in 1910. The engine, driven by compressed air especially for this visit, is under constant threat of dismantling, but the interest of two local engineers, and, as a result of the SIA tour, that of the Cdn Engineering Heritage Record, may serve to keep it *in situ*.

*Only a handful of the IA sites visited on this tour were "rare" or outstanding in the province when built. Most are noteworthy for the very fact that they survive, largely through continued use. And, more especially, they are representative of the industrial and engineering heritage of two leading Canadian industrial centres. Already it is evident that publicity and interest generated by this tour have given a measure of recognition and support to the concerned individuals and corporations engaged in the struggle to preserve IA sites—the very thing we're looking for. Worthy of note is that not a single site on the tour was listed as either a federal or provincial historic site, a fact that makes the various private and municipal efforts all the more commendable.*



Top: SIA Tourists being transhipped from the Toronto Transit Commission's special Peter Witt Car to a garden-variety PCC car. Right: Viewing the Burlington Bay Lighthouse, 1838, Hamilton. All photographs on this page by Ted Wickson, Toronto Transit Commission.





**THE OLD LIGHT SHIP NANTUCKET** has been taken ashore and will be made a permanent museum. Out of service since 1975, the ship had been on the Gov't's surplus list and in the custody of the Coast Guard at Atlantic City, N.J. After long negotiations, however, the *Nantucket* was returned to its home port and is being refurbished. There has been a light ship in service off Nantucket since 1854. The Nantucket Shoal now is guarded alternately by the old light ship *Portland*, renamed *Nantucket*, and a relief light vessel imaginatively named *Relief*.

**"SPINDLE CITY 1820-1940: The Development & Evolution of an Urban Industrial Community"**, an exhibit opening this summer, tells the story of Lowell, Mass., with special emphasis on its social structure and lives of its mill workers. An exhibit of machinery will trace the process of cloth manufacture from bale to bolt. The Lowell Museum Project began in October 1974 with a grant from the Nat'l Endowment for the Humanities, under the sponsorship of the Lowell Historical Soc. The exhibit is to be housed in the Wannalancit Mill, one of the few still-operating textile mills in the city. Office: Lowell City Library, 401 Merrimack St. 01854. (617) 459-6782. Director: John Bowditch [SIA].

**THE WESTERN MUSEUM OF MINING & INDUSTRY** is devoted to the history of mining in the Rocky Mountains, from the "barrow & burro" days through complex 20thC mining techniques [SIAN 2:2:1]. The Museum houses what probably is "the most widely varied American collection" of western mining machinery in the U.S. WMMI was incorporated in 1970 and began acquiring tools and apparatus. Since then, funds have been received from many sources, and this year it will begin construction of a permanent exhibition building. Notable among its acquisitions is a collection of 22 working model steam engines, demonstrating the entire spectrum of stationary steam power from the mid-19thC to the present. 1025 Northgate Rd, Colorado Springs 80908.

**SOUTH PARK CITY MUSEUM** recreates a Colorado mining boom town of the late 19thC, boasting 25 authentic buildings and about 40,000 artifacts, including a gold stamp mill, a hydraulic-mining nozzle, and steam air-compressors. Not only technology but the economic and social life—the fabled saloons and dancehalls of the raw West—are part of the outdoor Museum at Fairplay, Colo.

### MISC NOTES

**Pneumo-transit:** You can't keep a good technology down. You will all recall Alfred E. Beach's (editor of *Scientific American*) technically successful but financially and politically ill-starred experimental "Broadway Pneumatic Subway." In 1869-70 he constructed the first-ever subway in N.Y.C., one block long, in which a cylindrical passenger car was alternately blown and sucked through the circular-section tunnel by a colossal Roots-type blower. Well, never ones to let a good idea lie fallow, the Russians have constructed just such a one (presumably having waited for the Beach patents to expire) nearly 4 miles long in Zelenograd near Moscow, with twin concrete tubes. Ten-car trains are expected to travel at 60 mph.

**Slate recycling.** *Compressed Air Magazine* reports that an Easton, Pa. man has obtained a patent on and now is developing a promising roofing shingle in which a thin plywood base is coated with a composition formed of a binder and ground waste slate, that is cheaper and more durable than conventional asphalt-composition shingles. The basis of this is the vast mounds of slate waste and impurities that despoil the countryside in the slate belt of NE Pa. around Slatington and Bangor (namesake of Bangor, Wales, formerly the world's greatest slate center). [SIA Fall Tour, Oct 1974.]

**Assn. for Preservation Technology Annual General Meeting**, Hamilton, Ont., 29 Sept–2 Oct., & Pre-Conference Training Course: **Deterioration of Wood: Causes-Prevention-Cure**, 27-29 Sept. Full data on both: Ann Falkner, Box 2487, Station D, Ottawa, Ont. K1P 5W6, Canada.

**Soft Core IA.** The Olivetti people in a recent (nearly) half-page newspaper ad, above a transfixing legend advising us that "Tomorrow is not uncertain for confident decision makers," present a photograph not of your basic firm-jawed executive, but of none other than a deadpan Thomas A. Edison, seated by a tasty horizontal steam engine, c1885.

**10th Annual Conference of the Society for Historical Archaeology & 8th Internat'l Conference on Underwater Archaeology**, 5-8 Jan 1977. Govt. Conf. Centre & Chateau Laurier Hotel, Ottawa. Gen'l Chairman: Jervis D. Swannack, Nat'l Historic Parks & Sites Branch, Dept. of Indian & Northern Affairs, 1600 Liverpool Ct., Ottawa, Ont K1A 0H4. Chairpersons: SHA—DiAnn Herst; ICUA—Walter Zacharchuk (addresses as above).

**2nd Annual Antique Machinery Meet.** Museum of Transportation, 15 Newton St., Brookline, Mass., Saturday 11 Sept., 10-5. Bring & see all types of early machinery, machine tools, engines, electrical apparatus, trucks, cars, tractors, farm & road machinery, models, &c, &c. Information: Mary Bennett, (617) 512-1200.

**New Life for Old Buildings—A Symposium** sponsored by Frontenac Historic Fndn., Heritage Canada, and Ontario Heritage Fnd., 9-11 Sept. The Donald Gordon Centre, Kingston, Ont. Identification & documentation; protection; options in treatment; programs; funding; public awareness; districts; &c. Workshops, lectures, &c. Registration: \$20. Resident fee: \$33/day for board & lodging. Brochure. N.L.F.O.B. Box 27, Kingston K7L 4V6.

**Walking Tours: Southwark Area, Phila.** Heavy in IA: Spark's Shot Tower (1808); Humphrey Shipyard; site of the 1st U.S. whiteware factory (1769); &c. Slide presentation of inaccessible dock areas. Conducted by young people of the area. Info: Virginia Westbrook, 236 S. 44th St 19104. (215) 468-1645; 222-3194.

**The Camera As Engineer's Witness.** Exhibition of 60 photographs & related items of early engineering works in N.A., assembled by Ralph Greenhill [SIA], and the basis for his 1976 SIA Conference paper of that title. National Gallery of Canada, Ottawa. 10 Sept–17 Oct. To tour: Southern Alberta Art Gallery, Lethbridge, 1–30 Nov.; Mendel Art Gallery, Saskatoon, 15 Dec.–15 Jan.; Art Gallery of Greater Victoria (B.C.), 1–28 Feby.; Edmonton (Alb.) Art Gallery, 1–31 May. And...

**The Image of the Railway.** Lecture by Ralph Greenhill, Nat'l Gallery, Ottawa, 17 Oct. Check time. The relationship between the popular & stereotyped image of the locomotive and civil engineering structures, and the reality, in terms of technological development.

**SIA Pres Richard M. Candee** has resigned from his post of long standing as architectural consultant at Old Sturbridge Village, where he was instrumental in, among other things, the planning of, and acquisition of structures for OSV's nascent "New England Industrial Village of the 1840s." He has entered practice as a preservation consultant, dealing with all aspects of architectural preservation, from planning and funding to the nuts & bolts. 109 Bow St, Portsmouth, N.H. 03801. (603) 436-0333. Inquiries promptly and conscientiously attended to.

**Jackson L. Durkee [SIA]**, formerly chief bridge engineer of Bethlehem Steel's Fabricated Steel Construction Div'n and authority on the design and construction of large steel bridges, with the closing of the FSCD has spent the Spring Semester as Visiting Prof. of CE at Cornell, and now has entered private practice as a consulting structural engineer, Bethlehem, Pa.

**Norman R. Ball [SIA]** in late August will leave the gov't's Nat'l Historic Sites Div'n, Ottawa, where he presently is a historian of technology, and join as Science & Technology Archivist the Public Archives of Canada, acquiring and classifying material, and providing research advice to public inquirers.



Peter M. Malloy, Curator of the Merrimack Valley Textile Museum, on 1 Oct will assume Directorship of the Paterson (N.J.) Historic District, succeeding Russell I. Fries [SIA Secy], who will return to his teaching position at Univ. of Maine.

Historian with Ph.D. in the history of science or technology wanted about 1 October, to become Curator of Collections, Merrimack Valley Textile Museum. Salary to \$15,000, depending upon experience. Resume to Director, MVTM, 800 Massachusetts Av., N. Andover, Mass. 01845.

Continuing requirement for experienced Restoration Architects. The work entails studies, drawings, & specs for restoration of buildings & works to a specific historical period, or for conservation in existing condition. Requires arch, degree, eligibility for Canadian registration, or degree in a discipline related to the duties of an assignment and postgrad studies in urban & rural planning. Resume to Sciences & Technology Prog., Public Service Commn. of Canada, Ottawa, Ont. K1A OM7. Ref: No. AR-04-06.

The Society of Professional Archeologists has been incorporated to further high standards in the profession. A Code of Ethics, Standards of Research Performance, and Requirements for Recognition as a Professional Archeologist, and a set of Institutional Standards, have been formulated. Among its services, SPA will maintain a List of Accredited Archeologists. Inquiries: Edward B. Jelks, Pres. SPA, Dept. of Soc/Anthro, Illinois State Univ., Normal 61761.

The Union Pacific RR company archives have been deposited in the Nebraska State Historical Soc. The bulk of the collection consists of 492 volumes of corresp. in & out, from 1863 until the UP went into receivership in 1893. Included is a large body of the corresp. of Charles Francis Adams, Jr, UP pres. 1884-90. Inquiries: David Hooper, Asst. Archivist, NSHS, 1500 R St., Lincoln 68508.

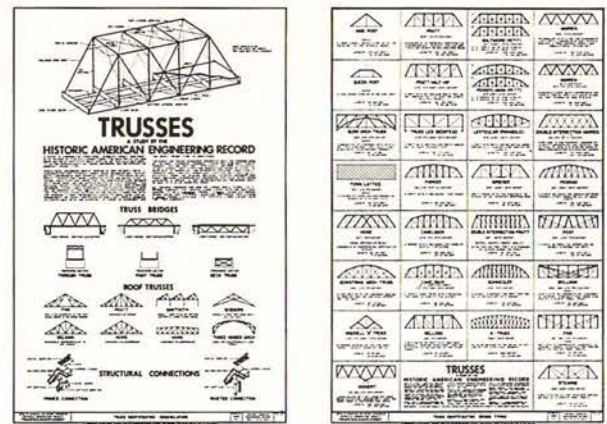
Hame Shop Available. (For you city folk, hames are the curved wooden pieces, against which the horse collar bears, and to which the traces are attached, in horse & mule draughtwork, especially heavy, as with wagons, ploughs, mine haulage, &c. You know, the things with the brass knobs above the horse's shoulders always seen in antique shops and you never knew what they were. That's what they are. A hame shop is where they're made.) Entire contents, late-19th-early 20thC: all wood & metal working machinery, belt driven, all shafting included. At each machine station is a hame part at its respective production stage. Last operated c1960 with an order in work, never completed. Equipment covers c1000 sq ft. Also present are records & corresp 1880s-1920s. Detailed inventory avail. Located NE Penna. Sold only as a lot @ \$4000. G. F. Jackson, P.O. Box 35, Willow Street, Penna 17584. (717) 872-6517.

HI IA. There is, of course, more to be found in Hawaii than silver beaches, the sugar and pineapple industries having left behind quantities of IA [SIAN 3:6:7 & Kahuku, above]. Donald A. Lubitz [SIA] of Honolulu has begun a private inventorying and collecting project, hoping ultimately to form an SIA chapter there and formalize his efforts.

### EDUCATION

Professional Training in Historic Preservation. 1976-77, Boston Univ. Community Education Prog. 1st semester classes begin week of 13 Sep 1976 with courses: New England Preservation Management (Richard M. Candee [SIA]); Historic Bldg. Conservation; Architecture & the City 1750-1890. 2nd semester (Jany 17, 1977): Adaptive Use of Older Bldgs (J. Timothy Anderson & Paul McGinley [both SIA]); Urban Planning Techniques in Hist. Pres. (Charles M. Sullivan [SIA]); Hist Pres Law. All courses for credit. Brochure. Comm. Edcn. Prog., American & New Engl. Studies, B.U., 226 Bay State Rd, Boston, MA 02215. (617) 353-2948.

Historical Outline of Architectural & Civil Engineering Technology, Fall, 1977, by Richard M. Levy [SIA]. Univ. Extension, Univ. of Calif. Berkeley. No. X411, 3 units.



### ROOF & BRIDGE TRUSS POSTERS

Who among us has not wondered what type of wood or iron bridge truss that was, discovered on a line of abandoned RR or obscure back road, or what to call the truss supporting the roof of an early mill or warehouse? Even if familiar with the basic Pratts, Towns, and Finks, what of the endless variety of lesser types, some peculiar to a single RR? Identification is necessary not only to satisfy one's own curiosity, but in such elements of the larger scheme of things as the filling out of Nat'l Register and inventory forms. Moreover—what of that troublesome business of trussjargon: the nomenclature that defies lay attempts at rationalization? What is a chord?—an eye-bar?—a pony truss? For the first time all is revealed with a conciseness not heretofore known, in a pair of wall charts prepared by the Historic American Engineering Record staff, available through the Montgomery C. Meigs Original Chapter of the SIA. Printed on heavy yellow stock, available in two sizes: 12"x18": \$3 the pair; 23"x35" \$4. \$1 mailing & handling per order. \$.50 per set discount to MCMOC members. MCMOC, editorial address. Checks to MCMOC.

### SIA AFFAIRS OUR STAFF

As you must by now realize, the SIA is a guaranteed-pure volunteer organization. We have this dream—when membership reaches 5 million we will hire a part-time paid staff person. And get a postage meter. Until then it's all in the hands of a dedicated few, who work solely for the little glory found in sacred devotion to the cause of Industrial Archeology. These people deserve to be recognized, for in all seriousness, without their devotion the organization simply could not function (N.B., lapses in publication schedules are entirely beyond their control; they must be held blameless in that department. To blame is the Post Office, and the occasional strike, insurrection, or civil disturbance.)



Mrs. Taylor, Prof. Looney, Mrs. Scott, and HAL, the period Addressograph plate maker.



Prof Charles T. G. Looney, formerly of the C.E. depts. of Yale and the Univ. of Illinois and latterly head of the C.E. Dept., Univ. of Maryland, is known to many of you, for he has missed not a single SIA Conference or field trip with the exception of the 1st Annual in 1972. He is a Research Associate in the Div'n of Mechanical & Civil Engineering, Nat'l Museum of History & Technology, and carries out a myriad of vital functions connected with the generation and distribution of all SIA publications.

Irmgard Taylor (who generally signs herself Nicki), has been designated Membership Coordinator, and deals with all matters in that critical area, as well as *other* myriads of vital details. Of the German persuasion, Nicki has brought to the Society's GHQ a Teutonic sense of order that happily has almost totally displaced the deepseated chaos for which it once was infamous.

While not exactly a volunteer, we must mention also, with fond gratitude, Catherine St. C. Scott, Secretary of the Div'n of Mechanical & Civil Engineering (which serves as a legitimate front organization for the SIA). It is she who has the periodic repulsive task of transposing a pile of disorganized, largely illegible "rough"—primitive would be a better word—copy into well-ordered typescript fit to send to the printer. She is uncomplaining, but we have observed that when on this job she cries a lot.

**CONRAIL: A Warning.** Field Curry [SIA] writes with regard to the proposed consolidated (freight only) rail system in the NE U.S. . . . everything is so vague it's impossible to be specific. Many miles of unproductive routes will be abandoned, including many structures and facilities of all kinds. For example, last fall I used the new highway across N.Y.'s southern tier which roughly follows the Lackawanna and Erie RRs. Long sections of the former that were bustling 25 years ago don't even exist any more. Thanks to stream canalization and urban renewal, hardly any of the towns look the same today. I sure hope the people up there like what they've been given but it left me reeling from the shock. I visited the Lehigh Valley RR shops at Sayre, Pa. Not too old, they were built when nothing was too good for the LV; the works mgrs' office has Corinthian columns framing the doorway. The powerhouse was immense but gutted after World War II coincident with the decline in the anthracite industry. Everyone's spirits were at low ebb as Conrail says they'll close the entire facility. This is typical of something that's going to be widespread and my feeling is that even if a facility isn't closed, it's going to come in for radical change. What this is leading up to, I guess, is that those interested in RR IA had better keep their eyes peeled, and if there ever was a need for individual initiative in recording, now's the time.

### PUBLICATIONS OF INTEREST

John T. Cunningham & Wm. Canfield, **Where Ideas Grow.** 22 x 34 map in color of N.J. inventions & products. \$3.40 PP. N.J. Chamber of Commerce, 5 Commerce St. Newark 07102.

Keith Ellis, **Thomas Telford: Father of Civil Engineering.** Priory Press, 101 Gray's Inn Rd, London WC1X 8TX. 1974. 96 pp. \$3.

Virginia Fairweather, **Recycling Older Buildings Preserves History, Saves Money.** In *Civil Engineering*, Oct 1975, pp 69-74. Good survey with much IA emphasis.

Michael Hanford, **The Stroudwater Canal, Vol I—1729-63.** Moonraker Press, 26 St Margarets St, Bradford-on-Avon, Wilts, England. \$8. 1st of 3 vols. A small but important, and very early element in the English canal net, joining Stroud—a woolen center—with Severn, principally for transporting fuel.

Antoinette J. Lee [SIA], **James Bogardus in Philadelphia.** In *19th Century* (Victorian Society in America), Spring, pp 33-36. Well documented account of his cast-iron architecture there. Illus.

Kenneth Hudson [SIA], **The Archeology of Industry.** NY: Charles Scribner's Sons. \$10. (to be reviewed in *IA*).

Robert D. Arbuckle, **John Nicholson & the Great Steamboat Rivalry.** In *Maryland Historical Magazine*, Spring, pp 60-64.

John W. McGrain [SIA], **Englehart Cruse & Baltimore's First Steam Mill.** In *Maryland Historical Magazine*, Spring, pp 65-79. Not *direct*, but by raising water to turn a conventional wheel, cal 1787. Splendid account of this and other early instances.

**Historic Engineering Works — A Walking Tour of Downtown Pittsburgh.** Prepared by History & Heritage Comm, P'burgh Section, ASCE, in coop with the other engineering societies, principal contributor: Field Curry [SIA]. Handsome 12 pp folder with illus & map; 21 sites. Just the thing needed for all cities. Engr's Soc of Western PA, Wm Penn Hotel, 530 Wm Penn Pl, 15219.

James E. Brittain [SIA], **A Brief History of Engineering in Georgia & Guide to 76 Historic Engineering Sites.** Georgia Inst of Technology, Atlanta. 33 pp. A fine, well balanced, concise guide to the highlights of the state's IA.

Dianne Newell [SIA], **Canada at World's Fairs.** In *Canadian Collector*, July/Aug 1976, pp 11-15. Illus.

L.J.K. Setright (Ed), **Some Unusual Engines.** Unconventional designs, both failures & successes. Publ by Instn. of Mech. Engrs. 130 pp. \$13.50 + post. Mechanical Engineering Publs, 15 W. 55th St, NYC 10019. (212) 757-2108.

Gary Vanderweil, **Draft Heating & Ventilating Systems of the Victorian Era.** In *19th Century* (Victorian Society in America), Spring, pp 14-18. Surprisingly early advances in this ill-documented area of mechanical technology, exemplified in three public buildings. Illus.

Wm S. Young [SIA] (Ed), **The PA Book—an Account of the Delaware & Hudson's Unique ALCO-GE Passenger Locomotives.** (*The Railroad Series, Vol 1*), Starrucca Valley Publs, Lanesboro Rd, Starrucca, PA 18462. Fine, well-illus account of the history & development of two of the early diesel locomotive classics, of which a few examples still are on the road. Documentation as it ought to be done: in its own time by one who knows.

James David Muhly, **Copper & Tin: The Distribution of Mineral Resources and the Nature of the Metals Trade in the Bronze Age.** Hamden, CT: Shoestring Press, 1973. 380 pp. \$15.\*

Philip Nicklin, **Journey Through Penna., 1835, by Canal, Rail & Stagecoach.** Republ by American Canal & Transp Center, 809 Rathton Rd, York, PA 17403. 96 pp. \$3.50+ \$.21 in PA. Daily journal of trip Phila to Pittsburgh. Recent sketches and early photos.

Charles E. Peterson [SIA] (Ed), **Building Early America.** On the occasion of its 250th birthday the Carpenters' Co of the City & County of Philadelphia held a symposium in 1974 bringing together Canadian, British & American authorities to discuss the development of the U.S. building industry to 1860. The collected papers therefrom have resulted in the first comprehensive work on the subject: antecedents, materials; techniques; restoration projects. 21 contributors. Avail March 1976, reservations taken now. 486 pp. 357 illustns, bibl, index. \$15. (+\$.90 in PA): Marketing Svcs Divn, Chilton Book Co, Radnor, PA 19089.

T.J. Reybould, **The Economic Emergence of the Black Country: A Study of the Dudley Estate.** N. Pomfret, VT: David & Charles, 1974. Examination of a part of the history of the iron & industrial area NW of Birmingham. Illus. \$17.50. 272 pp.\*

Norris F. Schneider, **The National Road: Main Street of America.** Brief account of the first federal road-building project: authorized 1806; completed to Ill. 1839. [See McKee, *SIAN* 2:2:5], Ohio Hist Society, 1982 Velma Ave, Columbus 43211. 40 pp. \$2.50.

R.W. Taylor, **Timber: History of the Forest Industry in British**



Columbia. N. Pomfret, VT: J.J. Douglas, Ltd. 1975. 220 pp, illus. \$11.

Roy Worskett, *Great Britain: Progress in Conservation*. In *Architectural Review*, Jany, pp 9-28. Review of British preservation, mostly houses but a long essay on New Lanark & its future with many photos & drawings of the mills and housing. Followed by...

Englesberg Ironworks (pp 29-34), and Marie Nisser, *Bergslagen, the Conservation of Sweden's Metal Making Area* (pp 35-40). Preservation of a nearly intact ironworks complex that operated from the 16thC; and status of historic blast-furnace and forge complexes with respect to efforts and attitudes of industry and government.

*From the Institution of Mechanical Engineers (Publs Dept, 1 Birdcage Walk, London SW1H 9JJ): Engineering Heritage*. Series of essays on major developments in the history of ME, heavily illus. Vol I, 1963, 184 pp; Vol II, 1966, 176 pp. Each: \$9.50 PP.

Fifty Years of ME in South Wales. 1972, 112 pp. \$5. PP.

ME: A Decade of Progress 1960-70. 197, 192 pp. \$7. PP.

The Mechanicals. 1973, 163 pp. \$5. PP. History of the IME.

#### SPECIAL PUBLICATIONS

Arnold & Walker, *Catalog 3: The Traditional Tools of the Carpenter & Other Craftsmen*. Tools for sale. \$3, by air; \$2, surface. A&W, 112 Balham Park Rd, London SW12 8EA, Engl. Dian Post (Comp), *200 years of Building America*. 1976 calendar, with 52 b/w illus of construction, bldgs, &c, and a significant event noted for each day. \$5. Associated Genl Contractors, 1957 E St NW, Wash, DC 20006.

*Preservation & Building Codes*. 25 papers on the relationship between codes and adaptive use of historic structures, and the various means being explored to vary codes to prevent total subversion of character. An increasingly vital issue in adaptive use. Preservation Press, 740 Jackson Pl NW Wash, DC 20006. 96 pp, illus. \$4.

*Reusing Railroad Stations, Book Two: A Report from Educational Facilities Laboratories & the Natl Endowment for the Arts*. Companion to *Reusing*... noted in SIAN 3:5:2&8. Directed at profit & non-profit groups wishing to convert stations - feasibility, market studies, income estimation, funding assistance, sources, &c. Case studies. 60 pp, illus. R.R.R.S. (I) has been reprinted: 80 pp, illus. \$4 each. EFL, 850 Third Ave, NYC 10022.

*Le Regne de la Machine Rencontre avec L'Archeologie Industrielle*. Catalog to an exhibition of that title plus an account of Belgium's rich IA [see SIAN 4:2/3:4], and 11 essays on IA and sources for its examination. 200 pp, \$4. Expo D'Archeologie Industrielle, Centre Culturel Pro Civitate, Boul Pacheco 44, 1000 Bruxelles, Belgium.

*The American Experience: a pictorial history of America*. In 20 portfolios, each containing 50 11" x 14" reproduced photos & prints + text describing the development of major aspects of American life. Intended for classroom use or in museums, historical societies, &c; for exhibit, teaching supplement. Pertinent portfolios: *Industrialization; The New Immigration; A Nation of Cities; America Builds*. A Smithsonian Institution-Scholastic Magazines project. \$24.50 each; \$400, the set. SM, Inc, 904 Sylvan Ave, Englewood Cliffs, N.J. 07632. Brochure avail.

*The James River & Kanawha Canal Tidewater Connection Locks*. Nice, illus brochure with history of the canal and the restored locks, Richmond, Va. Avail: Reynolds Metals Co, 12th & Byrd Sts, Richmond, 23219. Gratis.

George H. Corliss Day. Descriptive pamphlet of the events at the New England Museum of Wireless & Steam [SIA] 9 May 1976, consisting principally of a contemporary account of the Centennial Corliss Engine, with good photos & engravings. 8 pp. \$.75 PP. NEMofW&S, Tillinghast Rd, E. Greenwich, RI 02818.

*Sugarloaf Regional Trails,\* An Inventory of Historical Sites in Western Montgomery & Frederick Counties, Maryland*. \*(A joint planning project of the Sugarloaf Citizens Assn and Stronghold, Inc.).

An outgrowth of a project to examine in depth the entire cultural and physical history of the area with view to preparing a series of topical trail guides, all under the guidance of eminent urban historian Frederick Gutheim. A good third of the sites described are IA, including many mills (data by Md. molinologist John W. McGrain [SIA]); all B&OOR structures and the RR's Metropolitan Branch; all C&O Canal structures; and a variety of other structures & sites under such headings as Commerce & Industries; Roads; and Waterways. Thorough physical and historical descriptions are given. An altogether fine effort.

Presently O.O.P., to be reprinted. Avail then, & trail guides (Seneca Sandstone Trail; Rail Trail; Builder-Designer Trail; Ferryland Trail) now: SRT, Box 87, Dickerson, MD 20753.

*All-time Index 1929-1969*. Wayner Publications, Box 871, Ansonia Station, N.Y.C. 10023. (Avail most hobby shops.)

RR fanatics and modellers unwittingly have been collecting IA data for decades. The two major RR model magazines publish at least two complete sets of measured drawings each issue. Railfan magazines contain excellent articles on railroads or classes of equipment, together with first-person articles and more drawings. Like all enthusiast-generated publications, these magazines have been disregarded by scholars and vice-versa. The term "IA" has rarely, if ever, appeared in any of them; yet every issue contains at least one article that is pure IA. The material is so important that it deserves to be collected by serious IA libraries. Institutionally affiliated scholars (who can keep a straight face and endure ridicule) should encourage their librarians to subscribe and seek back issues.

The *Index* cross-references articles from: *Railroad Magazine*, *Model Railroader*, *Trains*, and *Railroad Model Craftsman*. In 186 pp of typescript, 30 pp list plans for equipment and buildings; 16 pp list RR histories, arranged by company name.

Outside the four indexed publications, RR enthusiasts are generating a growing number of specialist publications. *Slim Gauge News*, for example, is rich with illustrated articles on the little teakettle lines. Members of the Natl Model RR Assn are treated to a monthly *Bulletin* and occasional detailed data sheets. For railfans, the mother organization is the Natl Ry Historical Soc, which has a network of local clubs. Nearly every RR has its own historical society. *Edward F. Heite, Del. Divn of Hist of Cult Affairs*.

*Industrial Past: An Industrial & Transport Archaeology Review*. A voluntary effort of several IA groups, full of IA miscellany, articles, reviews, &c 20 pp issue; Quarterly; £1 (\$3)/year. Recommended. John Keavey, Ed, 17 Uplands, Skipton, N.Yorkshire, England.

#### MICROREVIEWS

Donald Beekman Myer [SIA], *Building the Potomac Aqueduct, 1830*. Wash: Commn of Fine Arts, 1975. (Avail: American Canal & Transp Center, 809 Rathton Rd, York, PA 17403. \$1.) What could be more natural than the author of *Bridges and the City of Washington, D.C.* (Commn of Fine Arts, 1974) writing this monograph; This most famous of all the Washington bridges carried in turn the 1/4-mile Alexandria Canal from its junction with the C&O Canal; Union troops during the Civil War; and foot, horse-drawn, motor vehicle, and trolley traffic in its later years, ending 1923, with the appearance of Key Bridge. Emphasis of the 16-pp booklet is on construction, based on 10 Turnbull/Ewing drawings from the Natl Archives, which are finely drawn but hard to see because of their small size and grayish background. Publication by the Preservation Press [SIAN 4:2/3:15] is an effort by the Natl Trust's publications program to assist member organizations with educational projects. *Tom Hahn, IA, American Canal Soc.*