The ruins of the Alaska-Juneau mill hang above the southeastern end of Juneau. (R) Lower Salmon Creek powerhouse: 2500-HP impulse turbine by the Pelton Water Wheel Co. (San Francisco) and G.E. alternator. To the left-rear are the Pelton-wheel needle-nozzle regulators, themselves powered by small impulse turbines. All photographs by Robert L. Johnson.

I.A. IN ALASKA

HYDROELECTRIC PLANTS OF THE A-J MINE, JUNEAU

The following is the first installment of two noting some of the IA observed by Robert L. Johnson, Rossville, Ga. during a consulting trip to the northernmost United State in the 1977 summer.

In 1880 gold was discovered in Silver Bow Basin, behind the city of Juneau. The strike was the start of a gold-producing era that saw the beginning of two of the world's greatest gold mines: the A-J (Alaska-Juneau), in the Basin; and the Treadwell group of mines on Douglas Island, W. of Juneau. Over $145 million in gold was produced by these mines up to their closing—the Treadwell in 1917 due to cave-ins; the A-J in 1944. The ruins of the A-J mill hang above Juneau and south of the town of Douglas are literally miles of interesting ruins from the Treadwell operation including the "glory hole," an early open-pit mine. All are well worth visiting. Considerable water power was developed for the mines and some of the installations remain, owned by Alaska Electric Light & Power Co., as marvellous, intact (two in operation) early-20thC hydroelectric plants. These developments consist of:

1) The Gold Creek Plant, c1912, located in Juneau, still runs two impulse water wheels (one of 400 H.P., with double runners; the other of 600-H.P., triple runners) driving the original 2,400-volt Westinghouse generators. The wheels have no governors, being regulated by the Salmon Creek plant (below). They are fed by a 3,000-ft., 4' x 4' wood flume taking water from Gold Creek in Silver Bow Basin, delivering it to a wooden pressure box and thence to a 2,100-ft., 36" diam. steel penstock under 210-ft. head. In recent years the plant’s capacity has been increased by installation of a Pelton vertical-shaft impulse wheel and generator. The powerhouse is intact with additions on the S. side.

2) The Sheep Creek Plant, at the mouth of that creek 4 miles SE of Juneau, built in 1906; a timber-frame structure covered with corrugated iron, containing three units. Two are 1,900-H.P., two-nozzle Pelton wheels direct connected to 2,300-volt, 60-cycle, 3-phase, 1,000kW G.E. generators. Separate exciters driven by 35-H.P. Pelton wheels supplied these. The third unit is a 225kW Westinghouse generator driven by twin Pelton-Doble wheels. The plant was closed in 1944 but stands in splendid condition giving the appearance of being ready to start up—due doubtless to the presence nearby of a caretaker. It was supplied by 3' x 4' wooden flume 2,500 ft. long and a 36" riveted-steel penstock 2887 ft. long under 600-ft. head. The flume is deteriorating badly, sections having fallen out.

3) The Annex Creek Plant, built in 1905, accessible only by helicopter or a 200-mile boat trip, was not visited. Located at Taku Inlet, 11 air miles E. of Juneau, it contains two 2,500-H.P. Pelton-Doble impulse wheels driving 1,750-kva, 2,300-volt Allis-Chalmers generators. The power is stepped up to 24,000 volts and transmitted to Juneau by a 12-mile transmission line supported partly on steel and partly on wood towers. It operates today essentially unchanged from its original construction.

4) The A-J built an 8,000-kw steam station at their mill at the S. end of Juneau; consisting of one 2,000-kw and one 6,000-kw unit. It was a standby plant and rarely used. The building stands today near the AEL&P offices, in use as a warehouse, the machinery removed.

5) On Douglas Island an elaborate hydraulic system was developed to bring water to a powerhouse on Bullion Creek. Fish Creek and Bullion Creek were given reservoirs; water was brought from these through a 12-mile covered ditch to a foraybay 570 ft. above the powerhouse, and from there through a penstock to the Bullion Creek plant and to the various air compressors and stamps at the adjacent Treadwell Mines. The plant stands badly vandalized. The Pelton wheels are intact but the generators and switchgear have been smashed for their copper and vandals have broken what they could not remove.

6 and 7) Perhaps the most interesting of the developments are the two power plants on Salmon Creek, 6 miles NW of Juneau. The first seen is the Lower Salmon Creek Plant, alongside the highway connecting Juneau with the airport. The plant burned in 1922 but the machinery was not damaged and immediately it was rebuilt. It contains two units, each a double overhung 2,500-H.P. impulse wheel pair driving G.E. 1400-kw, 3-phase generators at 2,300 volts. One unit was built by the Yuba Construction Co., the other by Pelton. Additionally, there are two exciters sets. The plant is closed but maintained in mint condition: neat,
clean, recently repainted, and apparently out of service only a short time due to penstock problems. It is supplied by a two-mile 5' x 6' covered wooden flume which begins just below the Upper Salmon Creek Plant, and two 1,625-ft. riveted-steel penstocks of 40" and 42" diameter. A narrow-gauge incline parallels the penstocks and terminates below the wood pressure box and its gatehouse. It is built on timber trestling and still is serviceable but falling into disrepair. It serves as the "stairway" to the flume. Below the flume and paralleling it a 2-mile tramroad connects the incline and upper power plant. It has been out of service for some time and sections are intact, but many bridges are collapsed.

It is possible that AEL&P will recondition the line and operate it in summer for tourists if funds can be found for the considerable restoration this would require.

**Upper Salmon Creek Powerhouse** is about a mile below Salmon Dam and receives water through a 30-40" penstock of 4,400 ft. Like the other A-J hydroplants, it is timber framed with concrete floor and foundation, sheathed in corrugated iron. There are two 2,500-H.P. Joshua Hendy single-overhung impulse wheels, driving G.E. 1,400-kw, 2,300-volt generators. Lombard type "M" oil-pressure governors control the deflectors and needle nozzles. Hendy also furnished the impulse wheels driving the G.E. exciter sets. This plant is in daily operation; the power is transformed to 23,000 volts for transmission to Juneau. The Salmon Creek Dam is a massive structure with 650-ft. crest, 165 ft. high, of constant-angle concrete-arch type. Atop the dam crest are the remains of the contractor's steam locomotives used in construction of the dam and power plants. The plant operators work in week-long relays, arriving by hiking up the incline and atop the flume. Supplies are flown in by helicopter!

**HYDROPOWER—SURVIVAL & REVIVAL**

**EARLY HARNESSING OF THE MISSOURI**

The harnessing of the upper Missouri River for its hydroelectric power was begun in the late 19th and early 20thCs on the stretch between Helena and Great Falls, Mont. One of the more historically interesting hydro structures still in operation is Hauser Dam, 20 miles N. of Helena.

The dam and powerhouse were started in 1905 by Mont. Power Co. and completed in 1907. In May, 1908 the dam washed out resulting in extensive flooding downstream and complete swamping of the powerhouse. The present dam was constructed 1909-11. The original turbines and generators were disassembled, cleaned, reassembled and have been in almost continuous operation since.

The generating units consist of five S. Morgan Smith (now Allis­Chalmers Co.) horizontal turbines on 2800 kw Westinghouse generators. In 1914 a 6th Smith turbine, and 4000 kw General Electric generator, were installed. The powerhouse contains most of the original transformer and distribution equipment and provides an interesting example of early-20thC hydroelectric technology. R.E.A.

**1907 HOUSATONIC RIVER STATION TO GO BACK ON LINE**

With a premium being placed on new sources of electric power generation, the old mill sites of the Northeast are looking increasingly attractive. A number of sites that provided natural sources of power to 19thC industries are again being used to generate electricity. Many of these sites saw earlier use around the turn of this century when small hydroelectric plants dotted the major rivers of New England supplying small utilities and manufactories with cheap electricity.

One such plant was the Monument Power Plant in the Glendale section of Stockbridge, Berkshire Co., Mass. (STOCKBRIDGE 358820). The powerhouse, a square single-story ashlar granite building, was constructed to generate power for the Monument Mills, 1 3/4 miles downstream in the village of Housatonic. With two 750-H.P. turbines fed by the waters of the Housatonic through a 1600-ft. canal, the station provided the mills with 1,120 kW. The textile mills ceased operations c1956, the power station closed down about 5 years later, and most of the equipment—including the original generators, one each from Stanley Electric and Westinghouse—was sold for scrap.

The station, long neglected and subject to vandalism, is about to see a rebirth. Mary C. Heath of Stockbridge and her brother Joseph Guerrieri, a retired civil and electrical engineer in California, have formed the Housatonic Energy Conservation Assn. (HECA), whose first project is to restore the power plant to operation, with sale of the expected 250-300 kW to Mass. Electric. HECA expects to operate the plant on a non-profit basis. "The plant," Guerrieri says, "would probably make just enough money to pay for its restoration and operating cost. But it would provide employment for laborers and one maintenance man."

With new gates, generators, and turbines expected momentarily, Mrs. Heather said, she hoped that the power station would be in operation by this summer. National Register status for the 71-year old station is pending. P.H.S.

**THE WORK OF IA**

**BALTIMORE CITY SURVEY.** A thematic survey of historic engineering and industrial sites has been initiated by the Baltimore City Dept. of Planning under a federal matching Survey Planning grant administered by the Md. Historical Trust. The $26,000, one-year project, to be conducted by Dennis Zembala [SIA], includes basic recording of manufacturing, transportation, and utilities sites in the Harbor areas, Jones Falls Valley, and various other sections of the city. Studies leading to possible adaptive reuses are being incorporated, as is research into the history of associated industrial activities and firms. The Baltimore Industrial Museum is cooperating. Information: Mark E. Edwards, MHT, State Circle, Annapolis, MD 21401.
HUDSON-MOHAWK URBAN CULTURAL PARK

Traditionally, urban parks have provided green breathing space for large cities lacking ready access to the park lands of more rural areas. A new concern with environmental quality has, in recent years, allowed the expansion of the concept or urban parks to embrace the total surroundings — cultural as well as natural. Lowell, Mass., with the Cohoes, Green Island, and Watervliet.

Cultural Park Commn., an intergovernmental body whose members plan based on the area's resources — natural, man-made, and cultural. The Comrn. hopes that in the process the plan may serve as a demonstrable breakthrough in community development planning.

The H-MUCP act, recognizing both the importance of the area's industrial history and the work of the Comrn., designed that body as the appropriate entity to coordinate the interpretation and development of the park, and called for a "heritage trail" to link the significant urban resources of the region. In January, the NYS Office of Parks & Recreation, to whom the plan was assigned, announced the selected consultants: the Preservation/Design Group of Albany, and Reimann, Beuchner, Crandall Partnership, landscape architects of Syracuse. In addition to designing a trail system to link major resources, the study team also will examine funding and legislative tools for the preservation and development of various aspects of the trail. P.H.S.

MINNESOTA ICE CUTTING

Ed Vickaryous, commercial fisherman and owner of the ice house, places bridles on ice blocks for hauling into house.

The last known ice-cutting operation in Minn. has described in a partially published manuscript by writer Michael Kopp who visited and photographed the project last winter [see "Echo of the Past on Northwest Angle," Minneapolis Tribune Picture Magazine, Mar. 5, 1978]. The ice has been harvested for 40 years by commercial fishermen on Lake of the Woods in the Northwest Angle. (The Angle is that peculiar point of northern Minn. that juts into Canada as the result of early-19thC diplomatic blundering in Europe, making it the northernmost point in the lower 48.)

A portable circular saw is used to score the 22×44-inch, thousand-pound ice blocks which then are sawn by hand. The blocks are maneuvered by gaffs and peavies through an open-water channel to the foot of a wood ramp built over the frozen lake into the ice house.

On the ramp the blocks are fitted with a 'bridle' — connected to a rope leading to the ice house entrance. Power is supplied via a pulley system from a 4-wheel-drive truck on the ice. At the top of the ramp the blocks are slid into the corrugated metal ice house where old tires keep them from crashing into each other and breaking. Here several men shove them into rows and then layers, with each layer separated by sawdust.

At one time about 500 to 600 blocks were stored in the house. Word since Kopp's visit is that ice might not be cut again and the 1977-78 natural ice harvest may have been Minnesota's last. R.M.F.

CONTRIBUTORS TO THIS ISSUE

STEEL ARCH. The future looks bleak for America’s first long-span (540 ft.) arch bridge with a suspended floor. The bridge was built in 1905, crossing the Connecticut River joining Bellows Falls, Vt. and N. Walpole, N.H. It was closed in 1971 when an engineering study reported it might be unable to bear its own weight. The bridge has levitated these seven years. On the Historic American Engineering Record’s inventory, the bridge cannot be replaced through federally funded programs until Natl. Historic Preservation Act procedures are fulfilled. While N.H., owner of the river bed, is responsible for replacement and eager to proceed, William Pinney, Vt. State Historic Preservaton Officer feels the bridge is of such significance as to preclude its destruction. With figures of $2-4 million being bandied about, the penurious N.H. government wants no part of historical considerations and hopes to replace the bridge at its present site as soon as possible.

TIMBER TRUSS. The Ala. Historical Commn., on the other hand, wants the U.S. to give it an old bridge—the Kymulga Covered Bridge in Talladega Co. In the Natl. Register, the 105-ft. Town truss, built in the 1860s, lies on federal land once part of the Army Ammunition Plant at Childersburg. The site is the only one in Ala. where a covered bridge and grist mill remain on their original site. Both structures would be preserved and restored by county or state agencies if declared surplus by the GSA.

TIMBER TRESTLE. A c1867 timber trestle in Md. has been added to the Natl. Register. The 400-ft. B&O bridge over Antietam Creek at Keedysville is believed to be the only “western type” trestle in Maryland and one of few in the eastern U.S.

VERTICAL LIFT. A 50-year-old lift bridge carrying RR traffic across Newark Bay (N.J.) has attained worldwide notoriety for the difficulties it presents to ship traffic in and out of Port Newark. The drawbridge carries 300-400 passengers a day, but has stymied further development of the port. Although valued as a connection for Bayonne commuters, the bridge often is difficult for ships to pass through, and on 28 days last year impossible, while the lift machinery was out of order. A $14-million channel widening or $12-million dismantling must be weighed against the conflicting demands of mass transit and shipping. L.F.G.
A Steel At Any Price or, the perils of the open hearth policy

A Commentary by Russell I. Fries, Univ. of Maine

The American steel industry is in trouble. Whether you pin the blame on somnolent management, high-rolling union labor, subsidized foreign imports (dumping), or excessive capital costs attributable to environmental laws the result is the same: steel plants are closing across the nation. Off hand this might seem to have little relation to industrial archeology as such, but it represents some of the economic facts of life that help to create new problems or opportunities for those concerned with the N. American industrial heritage. The result will depend upon whether IA strategies are drawn up now, or whether IA responds passively in this industry and others.

The problem for IA is the fact that the closing mills are not the modern facilities, but rather the antiquated ones which harbor all of the IA goodies. As we’ve observed earlier, open hearths are being eliminated at a frightening rate, and the beehive coke oven and Bessemer converter are but two of the technologies that have virtually disappeared in the face of environmental regulations or new technologies. Plant closings help to preserve the older equipment intact, since the cumulative process of repair, modernization, and replacement that kept plants going up to the present, but which altered them until they may be unrecognizable compared to the original configuration, stops the moment a plant is out of service. In essence, the closed plant becomes the sabre-tooth tiger caught in the tar pit at a certain moment of time, rather than the constantly mutating flu germ that changes almost as one watches. If there was a hope of saving some of the most important of these examples of earlier plants and technologies then the closing might in some sense be viewed as an enormous boon to the field of IA, providing monuments enabling future generations to view nd appreciate the raw power, unbearable heat, and amazing productivity of the plant of the late 19th and 20thC steel industry.

However, this result seems unlikely since the costs of preserving a steel mill in any semblance of its original shape and complexity stagger the imagination of most IA forces, still struggling to find the funding for the preservation of IA per se, takes place, it seems likely that any attempt to preserve such single-purpose structures intact will fail. It should be added that the scrap value of steel these days makes preservation even less likely, since the tax benefits of donating a plant might be even less than the salvage value of the plant, or at least the most easily portable parts (steam blowing engines, rolling mills, etc.)

What, then, should we be doing? One factor is clear—the cost of IA increases and the accuracy of the results decreases with every year the structure is allowed to remain idle. The workers move on, memories grow hazy (Was it ‘42 or ‘52 when they relined the converter?), the plant moulders, important parts are scrapped or vandalized, and the very documents that might help to interpret details are lost to the next flood or corporate efficiency drive. The time to record these structures is now, but the problem may be even greater than with normal preservation efforts. Usually there are forces (citizens’ groups, local politicians, or philanthropists) that are proud of and trying to save the endangered building or site. But the negative spillovers from these plant closings such as the recent loss of 5,000 jobs with the shut-down of Youngstown Sheet & Tube’s Campbell, Ohio plant—may make this impossible. In the case of the steel mills, typically the town is already in severe economic trouble and the workers and local politicians are more concerned with job losses than with preservation.

It is doubtful if anything except a large and nebulous IA group would have any concern for preservation. How should this effort be focused? Perhaps the best way is to try to change some of the traditional policies that HAER has followed, which generally require local initiative and some local funding. A portion of the HAER budget should be dedicated to non-matching programs if the resource is important enough and the chance of significant local funding is poor. An SIA Consulting Committee could advise on allocating such funds. Industrial archeology might lose some of its glamour but gain in accuracy if the steel works were recorded not by excavating its rotting site in the future, but by making movies of its operation, measured drawings of its facilities, and recordings of the workers and management discussing its hazards and accomplishments now.

The money saved (and excavating archeology is very expensive) could then be made available for other projects, or, perhaps, even reconstruction where warranted. However, until such changes take place, my own view is that the best hope of preservation is to have a healthy steel industry that can support some tax write-offs for historic preservation, even if that means that the tiger escapes the tar.

DAN PATCH LINE'S NO. 100

Dan Patch Lines No. 100 returned to glory. *Minnesota Transportation Museum* photograph by Frank E. Sandburg, Jr.

The Minnesota Transportation Museum (MTM), the same folks who gave us Twin City Lines streetcar 1300 [SIAN May 77:6] and Russell L. Olson’s *Electric Railways of Minnesota* [SIAN Sept. 77:6], have completed their 4-year, 9,600-manhour restoration of gas-electric locomotive Dan Patch No. 100. Erected by General Electric Co. in June 1913, it is believed to have been the first internal-combustion electric-drive locomotive on a common carrier RR in the world. The Minneapolis Service Shop of the GE Apparatus Service Div. donated help in rebuilding the trucks, traction motors, and generator.

No. 100 was built for the Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Co., which began operating in 1910 between Minneapolis and Northfield, Minn. It was nicknamed “Dan Patch Electric Lines” after the famous trotting horse owned by the line’s chief promoter, Col. Marion Savage. Originally, No. 100 had two 175 H.P. GM V-8 gasoline engines. With her arrival in 1913 the line became the first U.S. RR operated exclusively with gas-electric motive power. The trackage today is owned and operated by the Minneapolis, Northfield & Southern Ry.

By 1914 the GM engines were undergoing revision and when No. 100 was bought by Central Warehouse Co. of St. Paul 1917 it was rebuilt for straight electric operation over their industrial trackage. In 1922 the locomotive was re-sold to the Minneapolis, Anoka & Cuyuna Range Ry., a now-abandoned electric RR once operated just north of Minneapolis. The MA&CR was acquired by the Northern Pump Co. during WWI and reduced to a few miles of switching track in Minneapolis. During 1957 Northern Pump rebuilt No. 100 into a diesel-electric by installing a single 250-H.P. Waukesha diesel, the configuration of today. The Burlington Northern Ry. acquired the MA&CR in 1967 and donated No. 100 to the MTM.

When No. 100 had its debut this spring it was accompanied by two of the original Dan Patch locomotive engineers, ages 85 and 90, who had been located for the occasion. R.M.F., J.W.

RESPONSES

In answer to the query: “How many other bridges successively have carried a steam RR &c, &c?” (SIAN Jan. 78:4), we can point out that the Rochester (NY) Aqueduct, 1837, that carried the Erie Canal across the Genesee River also was used, with an upper deck added, to carry a trolley line and currently — with canal and trolleys removed — serves as a street bridge. Gerald R. Anderson, *The Canal Museum, Syracuse, N.Y.*
WHAT-IS-IT? DEPARTMENT

This long-neglected structure is located on the extreme southern tip of Sapelo Island, Ga., within a few hundred feet of an abandoned and much older tiplac brick lighthouse. The fluted columns, steps, and framing all are cast-iron, as are the decorative rosettes at the tie-rod intersections. Some type of beacon or range light? Information concerning the history or the use of this structure, or other surviving examples, is requested by David M. Sherman, c/o SIAN.

MISCELLANEOUS NOTES

ARCHIVAL MATTERS

CALUMET & HECLA MACHINERY. Between 1874 and 1905 the celebrated M.E. Erasmus D. Leavitt designed the equally celebrated Calumet & Hecla copper mining co. in Upper Mich. a family of some 40 great steam engines for pumping, hoisting, generating, and machinery driving — the most remarkable aggregate of high-quality, high-efficiency prime movers assembled anywhere in the steam era. They and their associated machinery were concentrated mainly in a two-mile strip along the axis of the mine’s principal vein. Although the drawings of most of the engines survive, and there was a good bit of engineering press at the time, all of the machinery has been gone since the 30s so it has not been clear just how everything related to the site. It now is. Wm. D. Sawyer [SIA] has at great pains gathered all available data and on a single long site plan shown the location of all engine and boiler houses, shafts, RR’s, and related features; and in insets the machinery arrangement in plan and elevation in all buildings. There is extensive historical and physical annotation. Copies of this impressive document are available: 10 ft. x 30 in., sent rolled. Ozalid, $7., blueprint (longer life), $9., PPd. William D. Sawyer, 1010 Bush St., San Francisco, CA 94109.

MINNESOTA HIST. SOC. has opened for research two collections of IA interest. First is the Vice Pres., Operating Dept. Files, another section of the massive Great Northern Ry. Co. Archives. Subjects range widely, from labor matters and “handling Chinese on passenger trains,” to silk trains, J.B. Strauss’ reinforced-concrete freight car (1920), and the high-pressure steam turbine locomotive of the Steamo­tor Co. (Chicago, 1927). The Twin Cities Terminal Study, completed during the 1930s, is a mine of information on stations, bridges, and grain elevators. The papers of Frederick McKinley Jones (1892-1961) include patent files and photographs from this self-taught engineer whose pioneer designs for mobile refrigeration units led to the formation of Thermo-King Corp. (Minneapolis, 1935), and revolutionary advances in the field of transport refrigeration for trucks, railcars, and ships.

EVENTS


A SENSE OF PLACE: THE ARCHITECTURAL LEGACY OF THE INDUSTRIAL REVOLUTION IN ENGLAND & AMERICA. The planned cities of Lowell, Manchester, Lawrence, and Holyoke, and industrial landscape of Lancashire and Yorkshire. Photographs by Randolph Langenbach [SIA]. Boston City Hall, Main Gallery, 6-30 October.

TOURS

CAST-IRON TOURS, N.Y.C. Friends of Cast-Iron Architecture will run their traditional series of Fall Walking Tours, featuring the World’s largest collection of C-I fronts in their many modes and moods. No better way to spend a Sunday afternoon. Oct. 22, 29 Nov. 5. 2:00. Information: (212) 477-2124.

GATEWAY HISTORIC TOURS & CRUISES. All aspects of the IA of the industrially important region centered on Troy, N.Y. Remark­able variety and number of events on most weekends through Nov. by bus, foot, boat. Information: 5 First St., Troy, NY 12180. (518) 274-5267.


RESEARCH INQUIRIES

BRICK & TERRA COTTA. Information sought on all aspects and architectural uses; mfr., marketing, technology, documentation of local factories. Ultimate intention to prepare a B & TC encyclopedia. Tom McGrath. 36-R West St., Beverly Farms, Mass. 01905. Addition­ally ... Theo. Prudon, author of the APT’s Supplement on Terra Cotta (1976) is updating that valued work and invites titles and corrections. C/o Ehrenkrantz Group, 19 W. 44th St., N.Y.C. 10036.

FULLING MILL. Does anyone know of one standing anywhere in N. America? John P. Johnson, 42 Water St., Assonet, Mass. 02702.

HISTORIAN-CURATOR OF TECHNOLOGY. Fall, 1979. Univ. of Delaware in association with Eleutherian Mills-Hagley Fndn. Combined teaching, MA/PhD supervision, and research curatorship. Rank dependent on qualifications and experience. Resumes to Chair, Dept. of History, Univ. of Del., Newark, DE 19711.


But all us crane freaks need a little release from time to time. The Boston Globe reports that in a London court a lawyer explained why his client, a 16-year-old Swedish sailor, climbed into a parked 50-ton crane, worked every lever, pressed every button, and left it a wreck with $40,000 worth of damage: "My client is interested in machines...So after drinking a litre [34 oz.] of neat vodka, and topping up with two pints of beer, he embarked on what can only be described as an orgy of mechanical lust."

Gerald Bloomfield [SIA], The World Automotive Industry. N. Pomfret VT: David & Charles (Box 572, 05053), 1978. 368 pp., 72 charts, 50 maps. $32.50. Development of the vehicle, the production process, the nature of manufacturing and assembly plants, and marketing and the economics.


Laurence F. Gross [SIA], The Saga of a Fancy Woolen Loom. In Shuttle, Spindle & Dyepot, Summer 1978, pp. 25-30, illus. (Box 7-374, W. Hartford, CT 06107, $3.50.) Rescue and restoration of a rare c1870 FWL by an intrepid LFG.


Robert L. Schuyler [SIA], Parallels in the Rise of the Various Subfields of Historical Archaeology. In The Conference of Historic Site Archaeology Papers (Stanley South, Ed.), 1975, pp. 1-10, and ...


Joel A. Tarr, Transportation Innovation & Changing Spatial Patterns in Pittsburgh, 1850-1934. Essays in Public Works History No. 6. Chicago, IL: Public Wks. Historical Soc. (1313 E. 60th St., 60637), April 1978. 64 pp., illus. $2.50. Impact of first the streetcar, then the automobile; also inclines.


INTERNATIONAL CONFERENCE PROCEEDINGS/TRANSACTIONS

Internatl. Conf. on Industrial Archaeology, Milan, June 1977. Delegates from Canada, France, G.B., Poland, Sweden, and the most important Italian Universities. In Italian, abstracts in English. Reports also from Brazil and U.S.S.R. Available: SIAI - Sez. Lombardia, c/o A. Negri, Via Lucano 2, 20135 Milano, Italy. $7.50.


Third Internatl. Conference on the Conservation of Industrial Monuments, Stockholm, May-June 1978 — National Reports. Marie Nisser, Ed. Reports on the progress of IA in all the represented nations except the Scandinavian (issued in separate volume): Austria, Belgium, Britain, Czechoslovakia, E&W Germany, France, Hungary, Italy, Japan, Netherlands, N. America, Northern Ireland, Poland, Switzerland. All in English, except Czech., Germany, and Hungary in German; France in French. 166 pp., heavily illus. Excellent summary of the world's recent work in the field. Avail.: SIA HQ, Room 5020. $12.
REGIONAL GUIDES & INVENTORIES

Daniel M. Bluestone (Ed.), Cleveland, An Inventory of Historic Engineering & Industrial Sites. Wash.: Historic American Engineering Record (Dept. of the Interior, Wash., DC 20240), 1978. 118 pp., illus. One of HAER’s first-rate recent inventories, covering topically: ore docks & engineering firms; iron & steel; automobiles; ship-building; machine tools; textiles; electrical [equipment]; chemicals; flour; waterworks; bridges; and specialized structures. HAER continues idiosyncratically to insist upon confusing corporate names with the names of sites and structures. In both site titles and illustration legends the inventory invariably speaks of, for example, the Cleveland Worsted Mills Co., when what it is inventorying, of course, is the CWMCo’s MILL or FACTORY or PLANT. Or, why title a photograph “The Walker Mfg. Co.” when it’s of Walker’s foundry, or more precisely, the foundry interior? They do right by the bridges and most other structures (“Newburgh & S. Shore RR Bridge”; “Division Ave. Pumping Station”) so why this curious blindspot?

RIVER TOUR GUIDES (see SIAN May 78:8). Three now are available:
- Upper & Lower Mississippi, and Ohio rivers. From Warren E. Brant [SIA], 2099 LaCrosse Ave., St. Paul, MN 55119. $3.45 ea. PPd. Much IA, as: locks, dams, factories, RR.

IA-RELATED PhD DISSERTATIONS


BIBLIOGRAPHIC COMMENT & MISCELLANY

HABS publications. Bear in mind that prior to 1970 sites and structures that now would be recorded/documented by HAER were dealt with by the Historic American Buildings Survey as Interior’s sole agency recording structures of any kind. Thus, much IA material is to be found in pre-1970 HABS publications. An example is Georgetown [DC] Architecture, the Waterfront (HABS Selections No. 4, 1968), with detail on the Potomac [canal] Aqueduct, the C&O Canal, a traction co. power house, and a large flour mill. HABS, HCRS, Dept. of the Interior, Wash., DC 20240. Inquire for availability of HABS publications and survey indexes.

“APT Communique.” If we’ve not mentioned it previously, the bimonthly information bulletin of the Assn. for Preservation Technology has during the past year been radically upgraded under the editorship of Barbara Daniels Swannack, into a meaty, informative publication that stands for a lot more than PT, taking in preservation, architectural history, a bit of all the archeologies, and some other things as well. Can be subscribed to separately: $8/year US (Canada & foreign?). B.D.S., Center for Anthro. Studies, Box 14576, Albuquerque, NM 87191.

Industrial, business & economic history. A colossal number of titles in these fields, 18th-20thCs, is reprinted by Augustus M. Kelly, Publishers (300 Fairfield Rd., Fairfield, NJ 07006). A great number are IA pertinent, depending more or less on one’s own boundaries of the field. Large general catalog is available. A six-page abstract of IA titles from the current (1976) edn. (produced by unspeakably crude cut-&-paste) is available from SIA HQ, Rm. 5020, for $.50 in stamps.


MICRO REVIEWS


This work, with concurrent texts in English and Italian, is planned as an examination of a series of events and special cultural facts in an effort to identify their inter-relationships and connection with industrial society. The image of industry in painting is reviewed in two works from the 16thC to the present, ranging from the wool mill scene of c1570 in the studio of Francesco de’ Medici to De Chirico’s painting of a modern workshop. The following study of industrial society and esthetic research provides an opportunity to present paintings of the present century with such technological themes as lighting, space expansion, radar, and magnetism.

Factory architecture, the function and form of architecture in industry, education of factory workers and facilities for their training, posters of industrial and trade exhibitions, industrial design and industrial themes in the decorative arts, the factory as seen in Italian films, and the industrial landscape are each considered in separate sections. The final section is concerned with IA. Sites described and illustrated range from the remains of industrial architecture in the late-18thC workers’ village of San Leucio near Caserta, probably the earliest in Italy, to include the Mongiola foundry in Calabria, the lime furnaces at Calde, a cement works at Alzano, the Caproni sheds in Milan, and the San Sabha rice mill in Trieste, among others.

This handsomely presented volume with numerous illustrations in full color obviously is intended as a presentation work and not for sale. Its value lies primarily on the identification of materials and sites relating to Italian industrial history from which further investigation may be developed. Silvio A. Bedini, Smithsonian Institution.


This work is a compilation produced jointly by the Ripartizione Cultura e Spettacolo of the city of Milan and the Assessorato ai Beni e alle Attivita Culturali of the region of Lombardy. It deals with the architectural and archeological history of the working community of San Leucio, situated a short distance north of Caserta. It was noted from the late 18thC for its silk mills developed under the Bourbon reign of Naples as an experiment in utopia.

This volume presents a comprehensive exposition of the economic development of the region, and historical and archeological consideration of its major architectural features. IA is the subject of a brief section by Antonello Negri [SIA].

The work is entirely in the Italian language except for English translations of the captions for illustrations. S.A.B.

The IA implications of this work are discussed by Paolo Caputo in the Martha’s Vineyard Symposium transactions, p. 18, q.v. Ed.


Never again can Jack White’s friends quite regard him as a mere mortal such as they. For, here is 8 lbs. of what may well stand as the most remarkable history of an entire technological species ever published. And, lest one presume that the price precludes purchase by any but fanatical buffs, be it known that the first-printing — by no means a short run — has sold out. Robert C. Post, Natl. Museum of History & Tech.