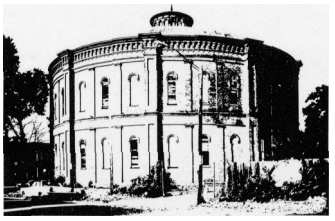
IA
THE JOURNAL OF THE SOCIETY FOR INDUSTRIAL ARCHEOLOGY

Summer 1975
Volume 1
Number 1



COVER: The illustration on the cover is a high contrast line conversion of a halftone on page 49 of ***A Report of the Mohawk-Hudson Area Survey,*** Smithsonian Institution, Robert M. Vogel, ed. The structure is a gasholder house of the former Troy Gas Light Company, Troy, N.Y. A gasholder house surrounds an iron gasholder in which gas is stored until needed.

Retrieval Card Section

NICHOLS-COLBY SAWMILL — BOW, NH

KEY WORDS: Clapboard-making machinery; feed-motion; flutter wheel; impulse wheel; mill dam construction; reaction wheel; sawmill; shingle-making machinery; stop-motion; up-and-down or vertical sawing machinery; wing wheel

ABSTRACT: At the time of its accidental destruction in 1938, the Nichols-Colby sawmill in Bow, New Hampshire, was thought to be the oldest surviving sawmill in that state and one of the few up-and-down mills left in New England. Because of the recording work of the Historic American Buildings Survey a few years earlier, it was also well documented and is a prime source of information about sawmill technology in the first half of the nineteenth century. It was built, as nearly as can be determined, during the first quarter of the nineteenth century, enlarged about 1839/40 to include circular-saw machinery for clapboards and shingles, and finally was equipped (probably 1850) with a pair of reaction-type water wheels.

REFERENCE: Penn, Theodore Z. and Parks, Roger, 'Nichols-Colby Sawmill in Bow, New Hampshire,' ***IA The Journal of the Society for Industrial Archeology,*** West Virginia University, Vol. 1, No. 1, Summer 1975, pp. 1-12.

UTM: 19.291060.4775630

BLACK POWDER MANUFACTURE

KEY WORDS: Black Powder; incorporating; wheel mill; stamp mill; press; corning mill; glaze mill; dry house; pack house

ABSTRACT: There is one operating black powder plant in the United States. It is the result of 600 years of technological development, culminating in the nineteenth century. This paper examines the surviving plant and the technological developments which it reflects.

REFERENCE: Howard, Robert A., 'Black Powder Manufacture,' ***IA The Journal of the Society for Industrial Archeology,*** West Virginia University, Vol. 1, No. 1, Summer 1975, pp. 13-28.

TOOELE COPPER AND LEAD SMELTER

KEY WORDS: Smelting; copper; lead; pollution; engineering; history; Dwight-Lloyd; Cottrell; filtration

ABSTRACT: Tooele was the second copper and first lead smelter constructed after an anti-pollution court decision. Its design included reduced manual labor through mechanized materials-handling and improved filtration to reduce pollution through horizontal flumes, Cottrell electrostatic precipitators, and a bag house. Last custom smelter in the Mountain West, Tooele represents the beginning and end of an era in smelting history.

REFERENCE: Comp, T. Allan, 'The Tooele Copper and Lead Smelter,' ***IA The Journal of the Society for Industrial Archeology,*** West Virginia University, Vol. 1, No. 1, Summer 1975, pp. 29-46.

UTM: Bingham Canyon Quad 12.396240.4489500

COKE OVENS AT UNION BAY

KEY WORDS: Coke; coal; mining and metallurgy; industrial process

ABSTRACT: An illustrated description of the 'beehive' coke ovens at Union Bay, British Columbia that were in use from 1895-1919. Coke manufacture was a very active industry in British Columbia serving the needs of copper smelters in the Province and in western United States.

The coke ovens at Union Bay were the only ovens located on Vancouver Island.

REFERENCE: Hughes, Michael C., 'The Coke Ovens at Union Bay,' ***IA The Journal of the Society for Industrial Archeology,*** West Virginia University, Vol. 1, No. **1,** Summer 1975, pp. 47-52.

Grid Reference: Canada, 92F/10 West Half.
Edition 1.ASE. Zone 10.
Series **A.721**

3638.55945.

ASCUTNEY MILL DAM — WINDSOR, VT

KEY WORDS: Civil engineering; masonry; dam; granite structure; waterpower; storage reservoir; arch dam; gravity dam

ABSTRACT: Few examples of large dams constructed earlier than mid-nineteenth century have survived in this country. Not much is now known of the evolution or design of earlier structures. Ascutney Mill Dam in Windsor, Vermont, built in 1834, is an exception as it is still in service and there are extensive manuscript records relating to its construction and early service. It was built as a gravity-arch dam of modern proportions. The exterior of the dam is cut granite, the filling apparently is of rubble. Total length of the dam is 360 feet and maximum height is 40 feet.

REFERENCE: Battison, Edwin A., 'Ascutney Gravity-Arch Mill Dam, Windsor, Vermont, 1834' ***IA The*** Journal ***of the Society for Industrial Archeology,*** West Virginia University, Vol. 1, No. 1, Summer 1975, pp. 53-58.

UTM: Goffstown Quadrangle, New Hampshire-Vermont 18.7107.48168