

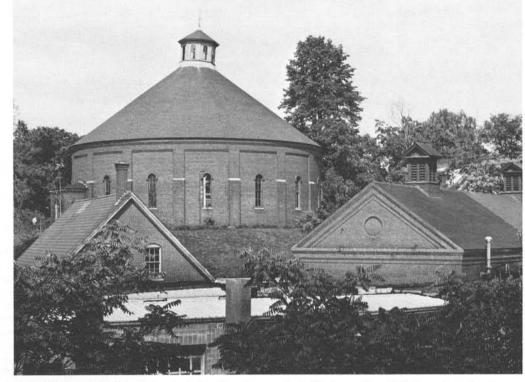
Volume 11, Number 4

Fall 1982

CONCORD GASHOLDER HOUSE RECORDED BY SIA NORTHERN NEW ENGLAND CHAPTER

In 1888 the Concord (N.H.) Gas Light Co. faced a serious crisis. Its gas storage capacity had become almost totally depleted because of increasing usage. According to an item in the Concord Evening Monitor of Apr. 7, "There were several occasions when at the hour of ten o'clock in the evening the holders in town were entirely empty and the only gas came back from the holder at St. Paul's school or was supplied by the constant make at the gasworks." Recognizing the need for prompt action, company officials decided to increase storage capacity by constructing a new gasholder at a cost of \$30,000. By the time work had been completed in Dec., the figure exceeded \$35,000.

The new gasholder was similar to others being built at the time. Deily & Fowler of Laurel Iron Works in Philadelphia furnished the plans, which were altered by John M. Hill to suit the specific site requirements. The tank (the masonry well within which the movable gasholder operated) and building were constructed by W. C. Whyte of N.Y.C.; according to the *Monitor*, Whyte already had built more than fifty such tanks



Concord (N.H.) gasholder house, believed to be the only such structure in the U.S. that survives with its iron gasholder intact. It was built in 1888 by the Concord Gas Light Co. In the foreground are the compressor (left) and purifier buildings. *Gary Samson photograph*.

throughout the country. The gasholder and other iron work were fabricated and installed by Deily & Fowler, a company that had completed "hundreds" of other holders.

As completed, the circular brick building measured 86 ft. in diameter and 28 ft. high. It had a slate roof topped by an octagonal cupola. The holder was of the single-lift type, 80 ft. in diameter and 24 ft. high. ("Single-lift" means that the holder was fabricated in a single piece; larger gasholders were made in two or three sections that expanded and contracted somewhat like a telescope.) It had a capacity of 120,000 cu. ft. and was constructed of riveted boiler plate. The weight of the 80,000-lb. tank furnished the pressure that forced the gas through the distribution system.

The company placed the holder in service in Dec. 1888. Its storage capacity solved the company's problems to such an extent that no additional holder was needed until after World War I. When the adjacent steel gasholder was finished in 1921, the 1888 holder became the repository for manufactured gas before it went to the new holder for city-wide distribution. This was done to allow some of the heavier tars and residue to settle out. It continued to be used this way until the company ceased gas manufacture late in the summer of 1952. That year the newly formed Concord Natural Gas Corp. connected with the national pipeline system bringing natural gas from the South and the Southwest. As soon as the city had been completely converted for the use of natural gas, the company discontinued operation of the 1888 gasholder.

Although out of service for thirty years, the holder was never altered or converted to another use by the gas company. Furthermore, it is believed to be the only surviving gasholder house in the U.S. with its gasholder still intact. As the last survivor of a oncecommon technology, it was essential to document the structure according to Historic American Engineering Record standards.

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The *SIA Newsletter* is published with the support of the Program for the History of Science & Technology, Case Western Reserve University, Cleveland, Ohio.

Room 5020

Published by the Society for Industrial Archeology Editor: Carol Poh Miller National Museum of American History Smithsonian Institution Washington, D.C. 20560