

Morris Canal,
Scotch Turbine
Lake Hopatcong
Hopatcong Vicinity
Sussex County
New Jersey

HAER No. NJ-29L

HAER
NJ,
21- PHIL,
1-L-

PHOTOGRAPHS

WRITTEN HISTORIC AND DESCRIPTIVE DATA

Historic American Engineering Record
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HISTORIC AMERICAN ENGINEERING RECORD

NJ-29L

MORRIS CANAL, SCOTCH TURBINE

HAER
NJ.
21-PHIL,
1-L-

Date: C. 1830

Location: Lake Hopatcong, Hopatcong Vic., Sussex Co., New Jersey.

Significance: The Scotch Turbine (as well as another that can be found at Plane 9 West) is an early 19th century example of a reaction wheel. Precursor to the modern hydraulic turbine developed in the mid 19th century, the reaction wheel worked on a principal of reactive pressure, as opposed to the direct pressure exerted on a water wheel, and worked much the same way a lawn sprinkler does. Although not very efficient it has the ability to run submerged and does not require the room that a water wheel required. Its use of iron casting in fabrication helped bring water power into the iron age.

Transmitted by: Dan Clement, 1983. For more information on the Morris Canal please see NJ-29.