

Canals in the New Republic

Canal building mania seized Britain and her colonies in the 1770s. Canals allowed bulk cargoes of coal, stone, and grain to move long distances and offered cheap transport of goods and passengers, as well as providing water to power the burgeoning mills. Upheavals of the American Revolution and its aftermath delayed the full onset of this frenzy in North America until the 1790s.

Anyone familiar with boats will understand the appeal of a canal. A person who can barely lift a hundred pounds can grab a line secured to a floating boat weighing many tons and easily pull the boat along the dockside. Similarly, a pack mule that could carry only about 200 pounds on its back could pull a canal boat carrying 30 tons of cargo.

Hundreds of canal schemes were proposed, but the first to be built were short works skirting obstacles on existing rivers. These were sometimes called *navigations* rather than canals proper. The Connecticut River had falls and rapids above Hartford that limited or stopped traffic, forcing it off the river and onto cart tracks—a slow, costly business. Navigations were constructed at the Great Falls at South Hadley, MA (1795); Turner's Falls, MA (1798); Bellows Falls, VT (1802); and around the Enfield Rapids above Windsor Locks (1829). By the 1820s it was possible to navigate the Connecticut as far north as White River Junction, VT without portaging.

Among the greatest challenges facing the new republic was opening a viable route to the west—the land beyond the Appalachian Mountains. From their southern end in Alabama to the Saint Lawrence River in Canada, there is only one path through the Appalachians that avoids climbs above 1,500 feet: the ancient ice-melt channels where the Mohawk and Hudson Rivers now flow.

Efforts to improve navigation on the Mohawk began in 1792, but the stream was too shallow in summer droughts to allow heavy freight. Also, this route led naturally to Lake Ontario, which is downstream of Niagara Falls, Lake Erie, and the Ohio Country.

A bold project was conceived to build a continuous man-made canal from the Hudson near Albany to the northern end of Lake Erie. Most of the route (and western New York) was still a wilderness, newly seized from (or ceded by) Britain's Iroquois allies. Lake Erie is 570 feet above the tidal Hudson, and the rise and fall in between was manageable.

It took 8 years and \$7 million to hand dig 363 miles of canal and build 83 lift locks, several dams, and over a dozen aqueducts carrying the canal or its water supply over intervening rivers and streams. Begun in 1817 and completed in October, 1825, the Erie Canal was an instant success. Tolls repaid construction costs in 9 years, and plans for enlargement were immediately pursued.

More important, the Erie Canal made western settlements commercially viable by giving their grain and other produce a market in the east, ensuring their prosperity and that of New York, and binding the two together. Freight rates between Buffalo and Albany dropped from \$100/ton to \$10/ton, then halved again. Travel time that had been two weeks by stage coach was now five days by packet boat.

The success of the Erie Canal did not just demonstrate the practicality of canals. It also threatened to route all the east-west trade of the new western territories through New York.

Pennsylvania embarked on a major state-funded project called the Main Line of Public Works to build a network of canals from Philadelphia to Pittsburgh (on the Ohio) and throughout the Commonwealth, using rope-tows to haul barges on rail cars over 1,500' mountain passes. This "portage railway" was powered by stationery steam engines on steep slopes and animal teams on more level passages over the 22-mile mountain crossing between canals.

Virginia and Maryland had collaborated early on in a scheme favored by George Washington to reach the Ohio Valley by following the Potomac River up to Cumberland, MD, then crossing the Eastern Continental Divide and down into Pittsburgh.

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Northern Appalachians with Erie Canal, 1825.



The mission of the Old Lyme Historical Society, Incorporated, is to collect, preserve, interpret and promote the rich history of Old Lyme, Connecticut and its environs for the benefit of residents and visitors.

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From the Chair

Dear Members,

A remarkably mild winter has helped to keep the heating bills down and left the snow trucks idle. (If you are reading this in a snow storm, please forgive my having tempted fate.) We hosted a fascinating account of the fad for painted cast-iron coin banks at the turn of the last century. It's interesting how transient and seemingly superficial things can highlight key aspects of past times. Our tour of Duck River Cemetery this fall focused on famous locals and changing fashions in stone carving, and was very well attended, as were our Fall Plant Sale and holiday book sales. Thank you all for your support!

Thanks to a grant from CT Humanities, we have upgraded our A/V capabilities and are ready to support guest lecturers with modern equipment. Upgrades in our Archives will soon follow, allowing more volunteers to work together to make our documents and artifacts more readily accessible to researchers.

OLHSI events and presentations resume this spring (as noted in this issue) beginning with an introduction to Genealogy by Gregory Evan Thompson. Please check our web site for further new lectures and events as they are scheduled.

– Mark Terwilliger, Chair,
Old Lyme Historical Society, Inc.



Old Lyme Historical Society Holiday Party
December 12, 2022

OLHSI Receives CT Cultural Fund Operating Support Grant from CT Humanities

The Old Lyme Historical Society, Inc was recently awarded a \$5,900.00 CT Cultural Fund Operating Support Grant from CT Humanities (CTH). CT Cultural Fund Operating Support Grants assist organizations as they recover from the pandemic and maintain and grow their ability to serve their community and the public.

The grant will be used to support the Society's mission to collect, preserve, interpret and promote the rich history of Old Lyme and environs by making the Archives collection more accessible, improving IT and online presence, support for the 2023 OLHSI Series of Events, and increasing marketing to make the organization more accessible to the community.

Mark Terwilliger, the Society's Chair, said *"We are particularly grateful to CT Humanities and the Legislature for recognizing and supporting the role of small, local organizations in our state. A relatively small grant makes a big difference in our ability to pursue our mission and serve our community."*

OLHSI is one of 724 organizations in Connecticut receiving a CT Cultural Fund Operating Support Grant. Totaling more than \$8.5M, these grants are part of a two-year, \$30.7M investment in arts, humanities, and cultural nonprofits by the CT General Assembly and approved by Governor Ned Lamont.



The Old Lyme Historical Society recently announced its 2023 volunteer Archives committee members. Shown from left are Lilo Hess, *Co-chairs*: Mary Ellen Jewett and Michaelle Pearson, Mary Jo Nosel, and Alison Mitchell (*seated*). (*Not shown*: Nancy Beebe)

The Old Lyme Historical Society Archives are open
Mondays 10 a.m. – 1 p.m. and Thursdays 10 a.m. – 2 p.m.



*Then & Now Community Calendar Launch
November 17, 2022*

OLHSI Launches 11th "Then & Now" Community Calendar

On November 17, 2022, the Old Lyme Historical Society had the pleasure of hosting its 2023 "Then & Now" Old Lyme Community Calendar launch. Over 100 guests attended the "after hours" event where light refreshments, wine, beer and soft drinks were served and the 11th annual 2023 collectable calendar was available for purchase.

OLHSI would like to thank this year's sponsors for their participation: the Town of Old Lyme, the Old Lyme Phoebe Griffin Noyes Library, the Old Lyme Historic District Commission, the Old Lyme Fire Department, the Old Lyme Town Band, the First Congregational Church of Old Lyme, Lyme Art Association, Essex Savings Bank, Florence Griswold Museum, and The Bowerbird.

The Society extends a special "thank you" to the OLHSI 2023 Calendar development team: James Meehan, Alison Mitchell, Michaelle Pearson, Mark Lander, Nick Westbrook, Nancy Mol, John Pote, Mary Dangremond, Cynthia Taylor, Jill Todd, and Matt LaConte.

*– James Meehan, Chair
OLHSI 2023 Calendar Committee*

Canals in the New Republic

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This scheme was later adopted by the Chesapeake & Ohio Canal Company (the C&O). Their plan in 1826 projected that a twisting 70-mile “middle section” from Cumberland, MD to Connellsville, PA would require 246 locks to negotiate a rise and fall of 1,961 feet, and cost about as much as the whole rest of the 341-mile canal system from tidewater at Washington, D.C. to Pittsburgh, PA (elev. 710'). The middle section was never built.

Massachusetts (and Connecticut) took a different approach. They sought a connection to the Hudson so they could share in the western trade moving across the Erie Canal, but they would not attempt canals through the Berkshires.

By 1830, experiments in Britain and America had demonstrated that high pressure steam could be reliably harnessed to drive a self-moving vehicle capable of pulling substantial loads along a railroad. Rails supporting carts with flanged wheels had been in use for decades to move very heavy loads under animal power or by rope tows. The locomotive waited only on the development of high-pressure steam boilers and engines to make it a reality. A steam railroad still needed nearly level ground (a rise of less than ~1 foot in 70, early on), but it did not need locks to rise or fall, and it was cheaper, faster, and easier to build than a canal. With early average speeds in the range of 8 mph, rail was substantially faster than canal traffic. Unlike canals, railroads did not shut down over the winter.

Massachusetts chartered and built railroads from Boston to the Hudson, overcoming substantial challenges in the Berkshires. When the route was completed in 1841, it was the longest and most expensive point-to-point rail connection yet built in America.

The first railroads in Connecticut followed the river valleys north to connect with the east-west railroads in Massachusetts. The great object of all of these projects was to secure the trade of the West.

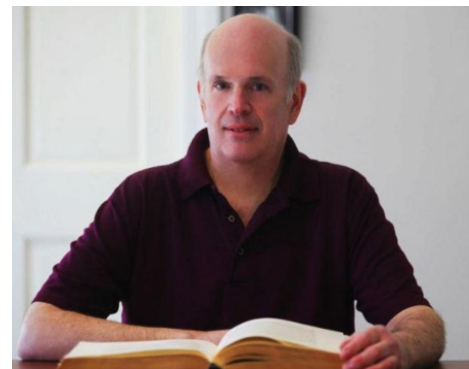
By the 1840s, the railroads were making such headway against the canals that many canal lines were bought by railroads just to use their relatively level right-of-way. This was the fate of the most ambitious canal project attempted in Connecticut, the Farmington Canal connecting New Haven with Northampton, MA. It was also the fate of the C&O, bought by the Baltimore and Ohio RR, partly to prevent its potential competition, but also to cannibalize its rights-of-way for a rail connection to the Ohio at Wheeling, VA (now WV). The Pennsylvania Railroad cannibalized much of the Main Line, replacing canals with railroad tracks. Even in New York, where the Erie Canal remained competitive into the early 20th century, new railroads followed or paralleled its path across the state.

Even so, all the east-west rail lines serving New York markets had to lower their freight rates in seasons when the Erie Canal was operating. The laws of physics are self-enforcing, and water transport is still the most energy-efficient way to move freight.

– Mark Terwilliger

2023 OLHSI

Series
OF EVENTS



Genealogy for Beginners

Presented by
Gregory Evan Thompson

Greg Thompson is a professional genealogist for over 40 years and is currently the Governor of the Ct Society of Mayflower Descendants, the Genealogist for the Avery Memorial Association, and the genealogist for the daughters of the Cincinnati. He is also the archivist for the Old Saybrook Historical Society. He is a member of the CT Professional Genealogist Council as well as a member of many other genealogical and historical organizations.

He currently teaches a genealogy class at the Milford Public Library on the first Monday of each month and specializes in preparing lineage applications for various genealogical societies.

Thursday, March 30, 2023,

7 p.m.

55 Lyme Street, Old Lyme, CT

Free Admission

*Donations for the Carol Noyes Winters
Scholarship Fund are welcome*

Support for the 2023 OLHSI Series of Events has been provided to Old Lyme Historical Society, Inc. from CT Humanities (CTH), with funding provided by the Connecticut State Department of Economic and Community Development/Connecticut Office of the Arts (COA) from the Connecticut State Legislature.