

Program: The Erie Canal (via Zoom)

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Introduced by: Jim Willson

Attendance: 66 via Zoom

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Also, this session was recorded and is freely available on the Sciencetech Club web site: <https://www.sciencetechclub.org/zoom/391.mp4>. This link can be shared with others.

Erie Canal – Summary

The United States built the second longest canal in the world, in the least time, with the least experience, for the least money and to the greatest benefit. No formally trained surveyors or engineers were used. Shipping costs across New York State were reduced by 90%.

The canal was begun only 40 years after the founding of America and only five years after the start of the War of 1812. The new country took up the challenging task of building a canal after thousands of years of worldwide experience.

The Erie Canal was 363 miles long plus 150 more miles from Albany to NYC via the Hudson River. It was 40 feet wide and four feet deep and was altered in 1862 to 70 feet wide and 7 feet deep. The Canal contained 35 locks and 18 aqueducts. It was built in the Mohawk River Valley. At 149 miles long, the Mohawk is the longest tributary of the Hudson River. The Mohawk River is the only east-west river that travels through the Appalachian Mountains from New York to Alabama.

Sophisticated equipment such as picks and shovels, wheelbarrows, horse carts and bare hands were used. On land, a horse or a donkey can carry 250 pounds. But the same horse can tow 60,000 pounds in a boat through the water. What had taken 32 days on land to travel across the state now took five days by canal.

The most important person responsible for the completion of the canal was DeWitt Clinton, nephew of George Clinton, former governor of New York (1777-1795, 1801-1804) and U.S. vice president (1805-1812); George Clinton was an acquaintance of George Washington. In fact, Washington saw early on the value of a canal across New York State. Washington and George Clinton traversed New York from Albany to Lake Erie in 1784. Washington thought that once the settlers had crossed the mountains they would no longer have any loyalty to the U.S if there was no good transportation route..

In 1724, Cadwallader Colden advocated for a canal from Albany to Lake Erie. He traveled to the Mississippi River. Christopher Colles had learned canal navigation in Ireland. He proposed a canal to the New York legislature in 1784, but it was not

adopted. Gouverneur Morris was an author of the New York State constitution and author of some of the U.S. Constitution. He was a tireless speaker and promoter of a canal. Another man to present a study to the legislature was Elkanah Watson; that study was also ignored.

One of the more curious men involved was Jess Hawley. While in Debtor's Prison he wrote 14 essays on canals. He listed the methods of construction and estimated the cost at \$6 million. He was very close to the actual amount. No one knows how he did it.

The man who did the most was DeWitt Clinton as mentioned. He was a scholar of history and ornithology. He was Mayor of New York City for ten one-year terms, twice was Governor of NY, twice was a State Senator and was a U.S. Senator. He lost the Presidential election of 1812 to James Madison. The U.S. Congress refused to fund the Canal so Clinton had it approved by NY State in 1817.

The Canal building began in the middle section which was relatively flat. 59 miles were completed from Utica to Syracuse. One thousand men began the project and by 1819, 4,000 men and 1,500

horses were involved. By 1821, 9,000 men were at work. In all, 3,000 Irish immigrants worked on the Canal. Presumably many of them stayed in the U.S. To fund the canal, bonds were sold in America and Europe.

Canal towns were: Albany – State Capitol – shipping; Schenectady – cotton mills; Little Falls – dairy and cheese; Utica – lumber & furniture; Ilion – Remington Arms; Rome – dairy & cheese; Syracuse – salt and manufacturing; Rochester – grain center; and Buffalo – the largest inland port.

Canal work began on 4 July 1817 and finished on 26 October 1825. The first tolls were collected in 1820. By 1824, tolls equaled one-half of the debt service and the debt was paid off in 1837. Growth was amazing – the west overflowed with settlers. New York City became the largest U.S. port. The term "Empire State" was applied to New York. The *London Times* stated that New York City would be the London of the west. So much money flowed into the NY banks that it became the money center of America.

At the end, massive celebrations were held. DeWitt Clinton was seen pouring a container of Lake Erie water into New York harbor!

The Erie Canal Museum is located in Syracuse, New York.

ADDENDA - The Canal was widened to 70 feet wide and 7 feet deep. The lock size was increased to 150 feet wide by 18 feet deep. That was completed in 1862. In 1915, the entire Canal was widened to 150 feet and 12 feet deep. It was renamed the NY State Barge Canal and later changed to the NY State Canal System.

The railroads and the St. Lawrence Seaway ended traffic on the Canal.

Today, there are 200 miles of Barge Canal, which includes segments of the Erie Canal, for recreation.

Sciencetech Club member Jerry Williams tells me that there is a yearly bicycle event along the Canal. (Canceled for 2020 because of COVID-19)

An interesting 60 minute documentary on the Erie Canal can be viewed at:
<https://www.pbs.org/show/erie-canal-made-america/>



William Dick, MD