

In partnership with the National Park Service

Erie Canal

200 Years of hydraulic construction

Duncan Hay

Erie Canalway National Heritage Corridor

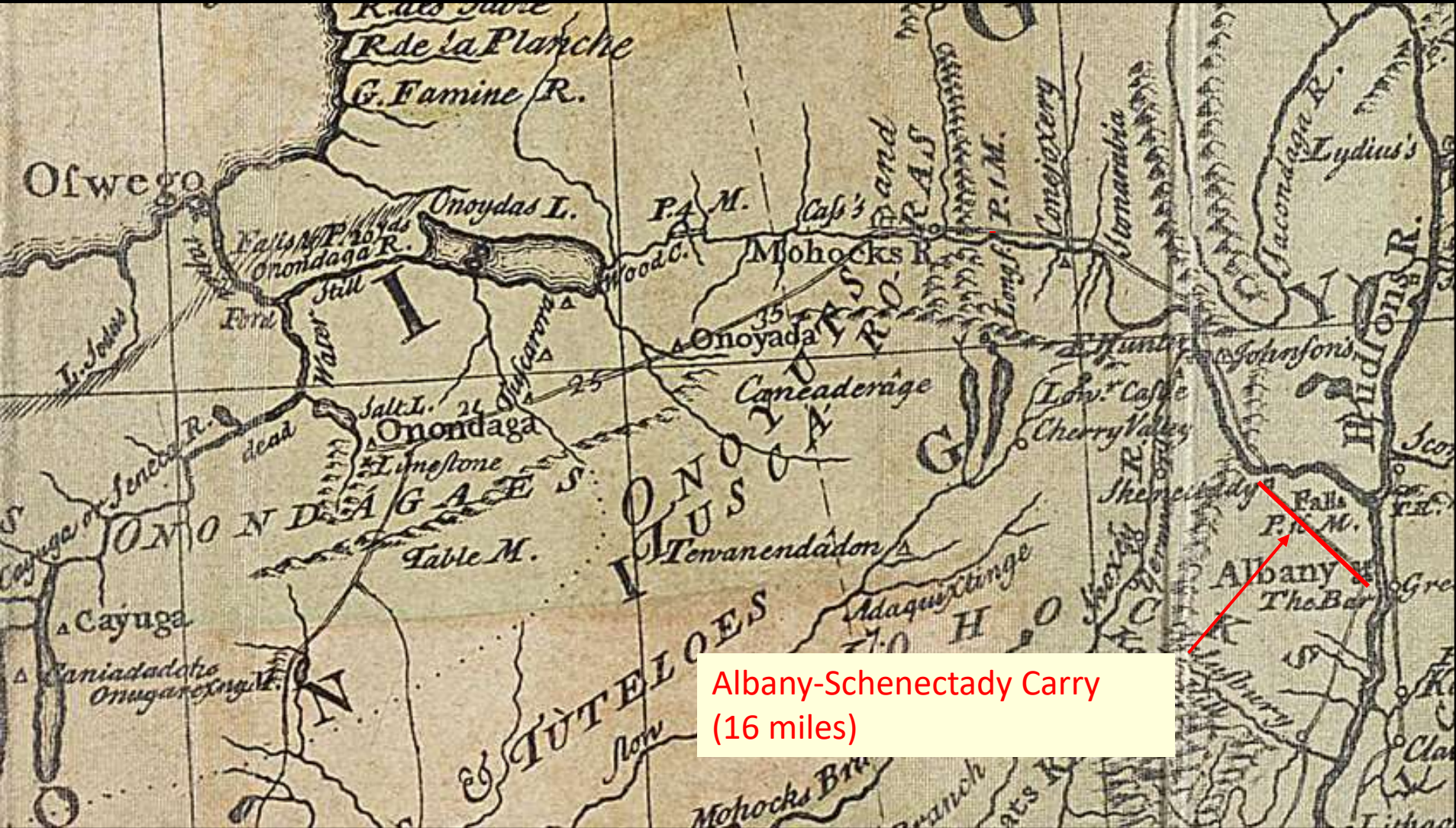






William Guy Wall, artist – John Hill engraver, *Hudson River Portfolio*, 1821-25

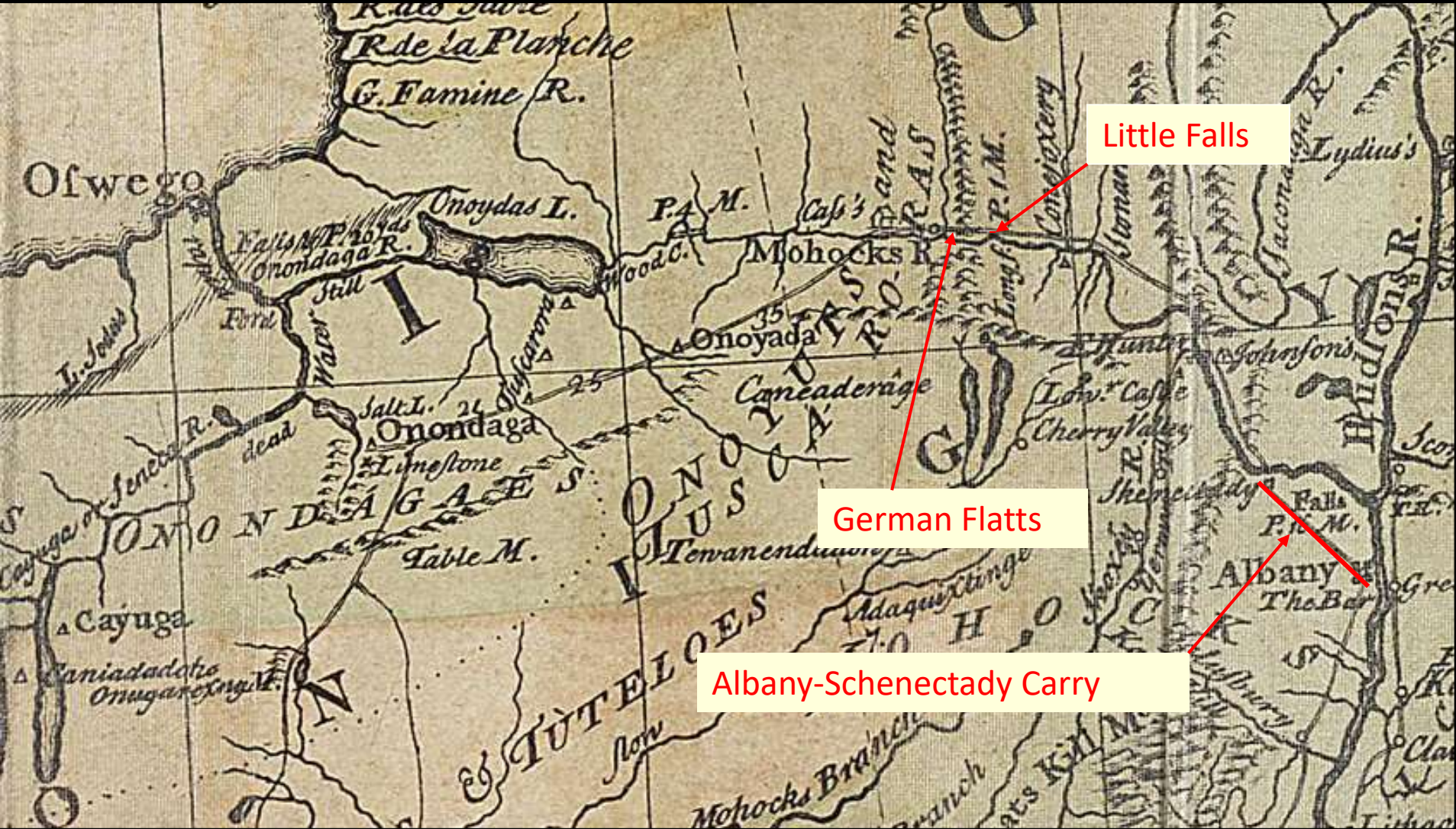




General Map of the Middle British Colonies, 1755 (detail)



Rufus Grider, Binnekill Landing on the Mohawk at Schenectady c. 1800
New York State Library

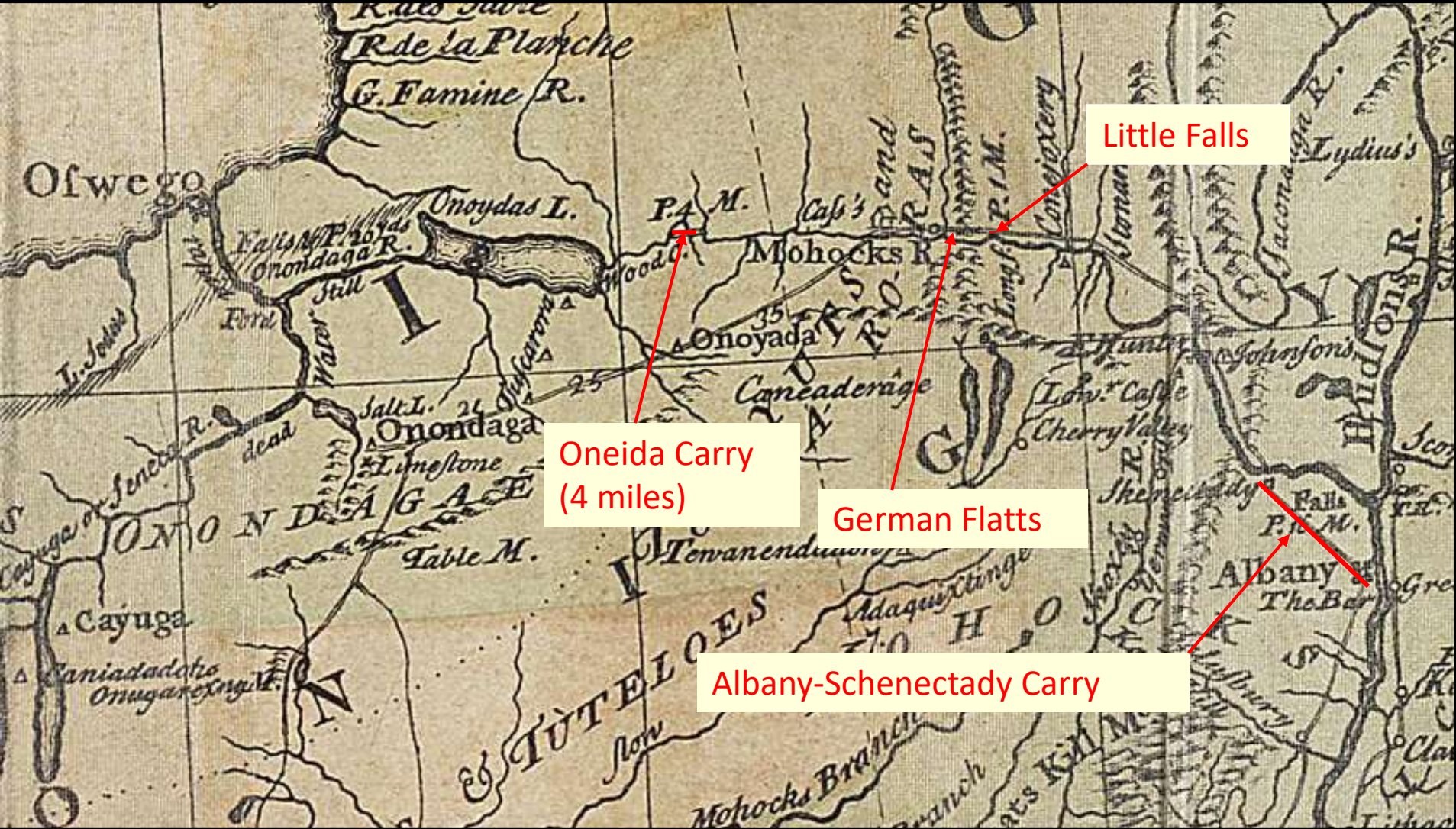


Little Falls

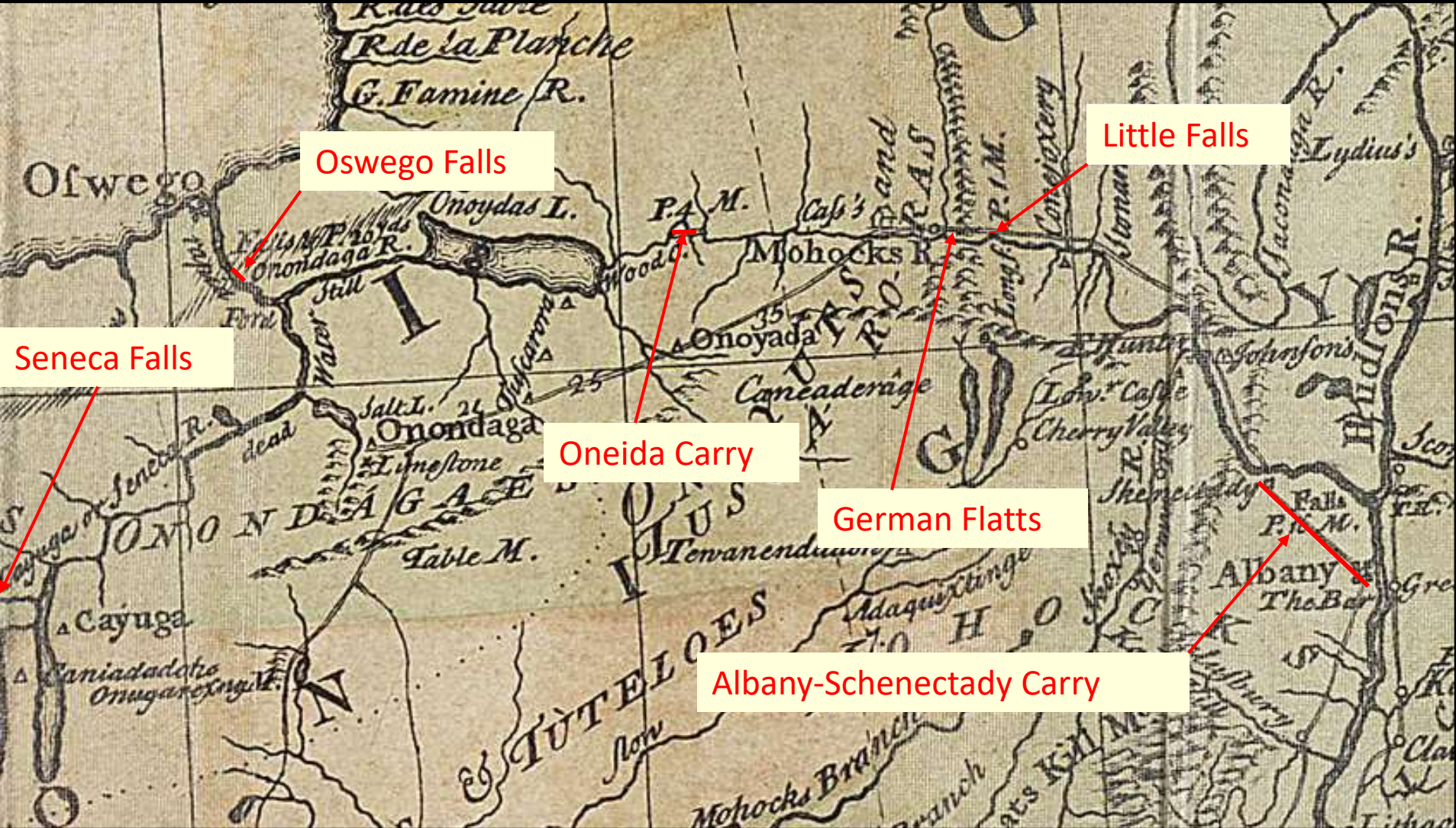
German Flatts

Albany-Schenectady Carry

General Map of the Middle British Colonies, 1755 (detail)



General Map of the Middle British Colonies, 1755 (detail)

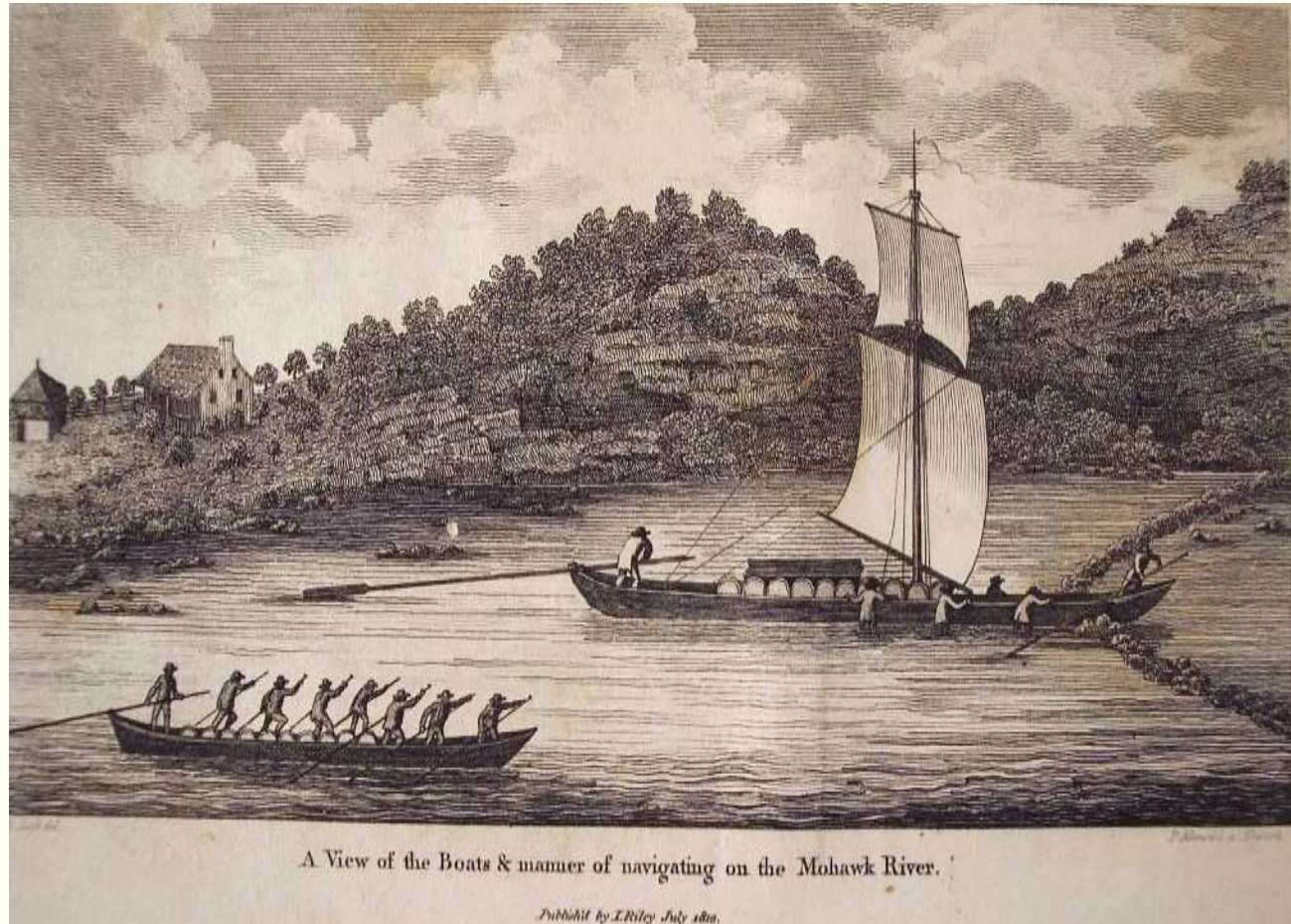


General Map of the Middle British Colonies, 1755 (detail)

Western Inland Lock Navigation Co. 1792



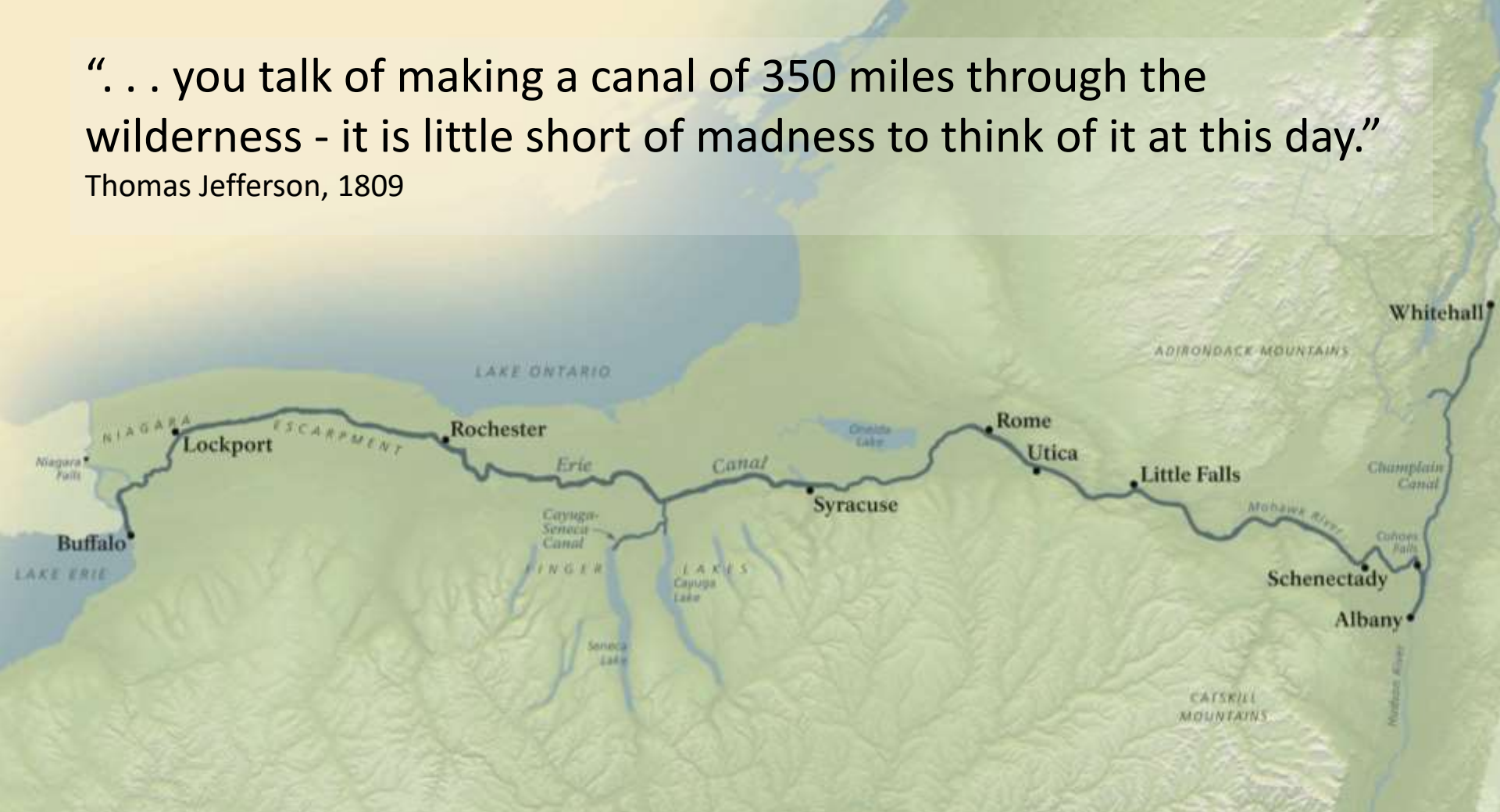
- Schenectady to Oneida Lake
- Short canals, locks & wing-dams
- Canals at Little Falls, German Flatts, Rome & Wood Creek
- Locks
 - 60' (18 m) long
 - 8' (2.4 m) wide
 - 2 ton vessel capacity





“... you talk of making a canal of 350 miles through the wilderness - it is little short of madness to think of it at this day.”

Thomas Jefferson, 1809



Erie Canal

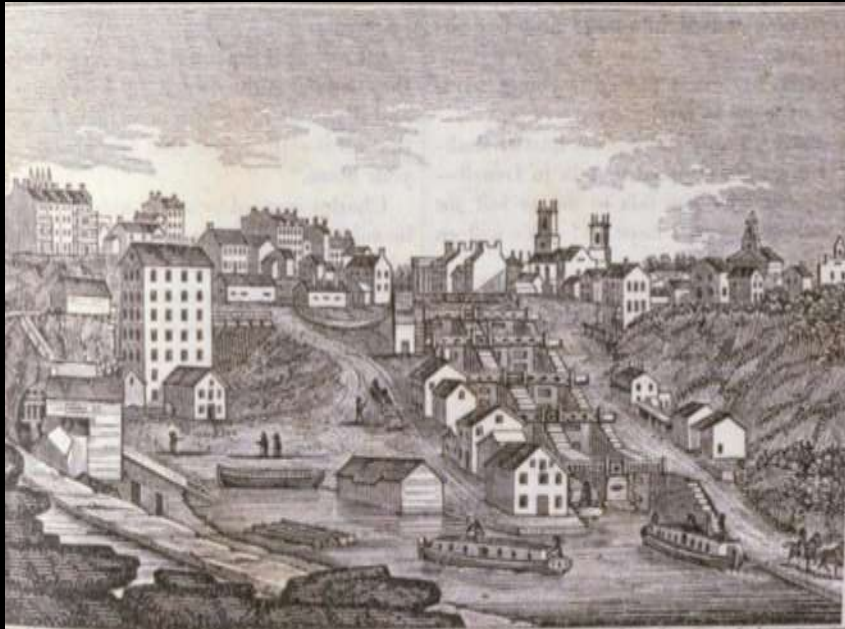
Constructed 1817-1825



363 miles (584 km) long, 40' (12 m) wide, 4' (1.2 m) deep

Erie Canal

Constructed 1817-1825

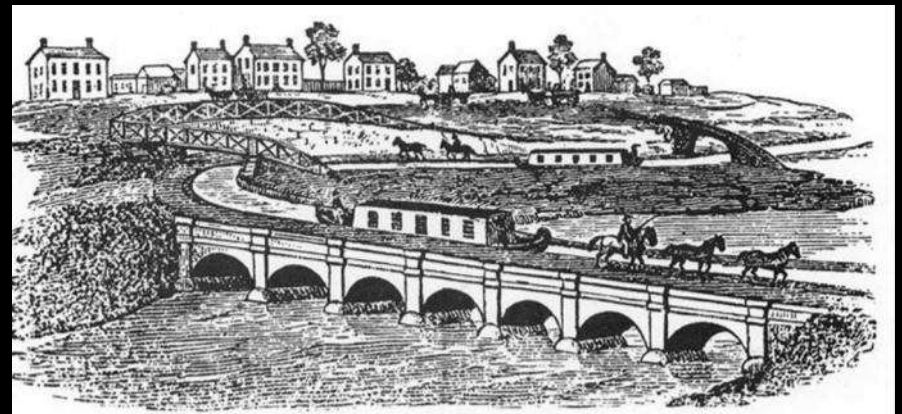


83 Locks

90' (27.4 m) long

15' (4.6 m) wide

30 ton vessel capacity



Erie Canal

Constructed 1817-25



- Connected Atlantic to upper Great Lakes
- Opened Midwest to settlement, commercial agriculture, and industrialization
- Confirmed New York City's status as America's principal seaport
- Promoted growth of Cleveland, Detroit, Chicago, & other Great Lakes ports



Passengers



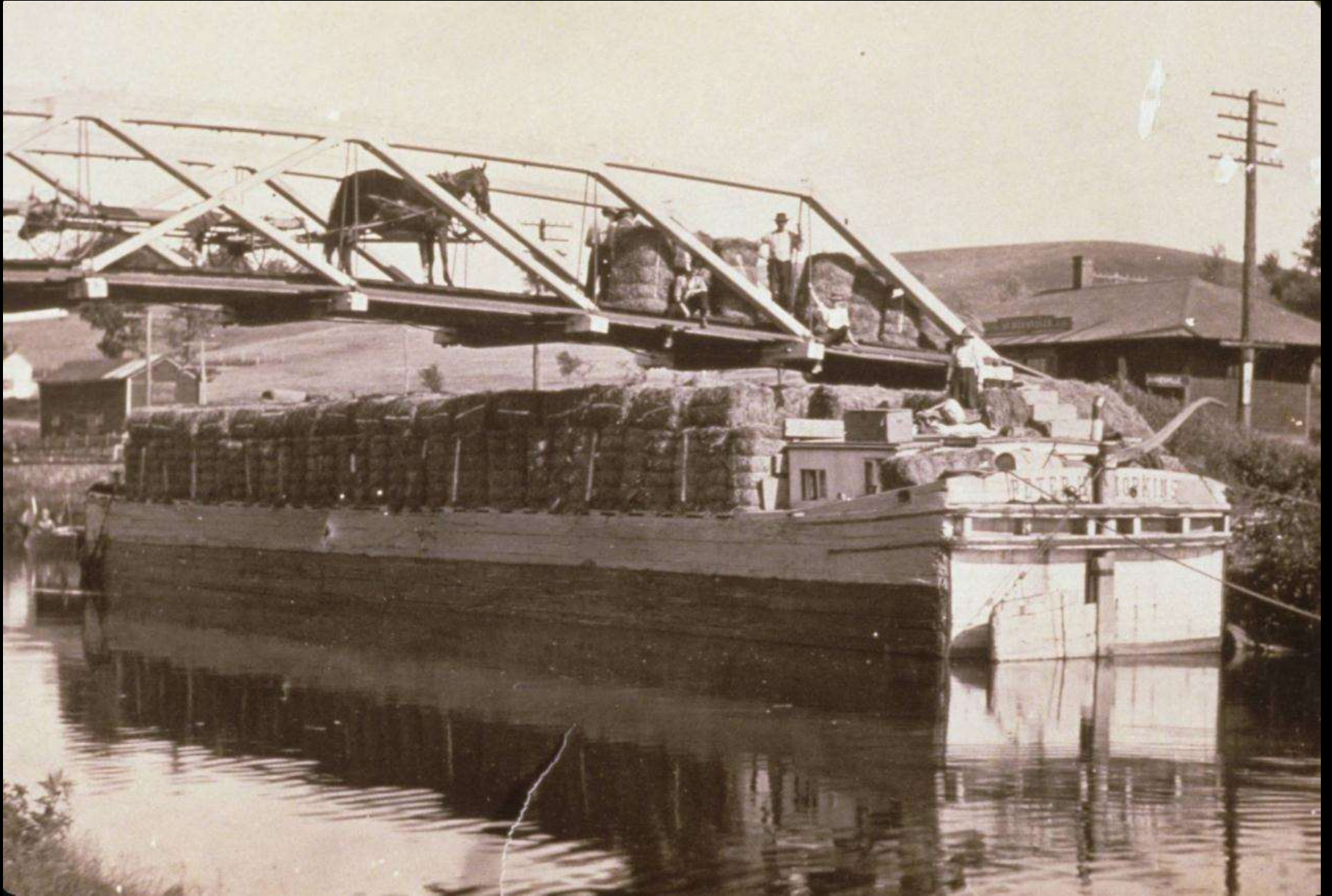
Lumber



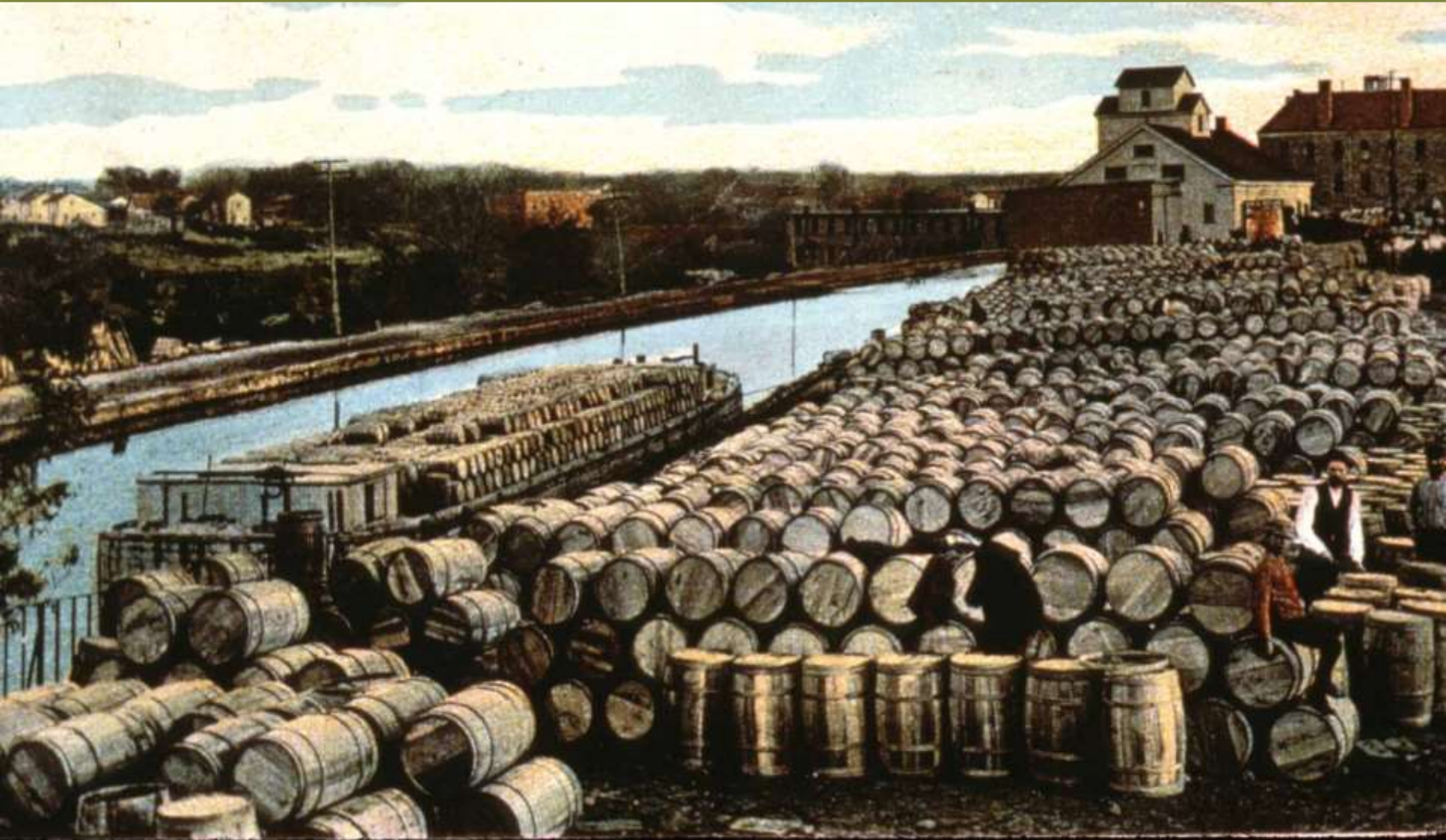
Coal



Hay



Apples, Cheese, Beer



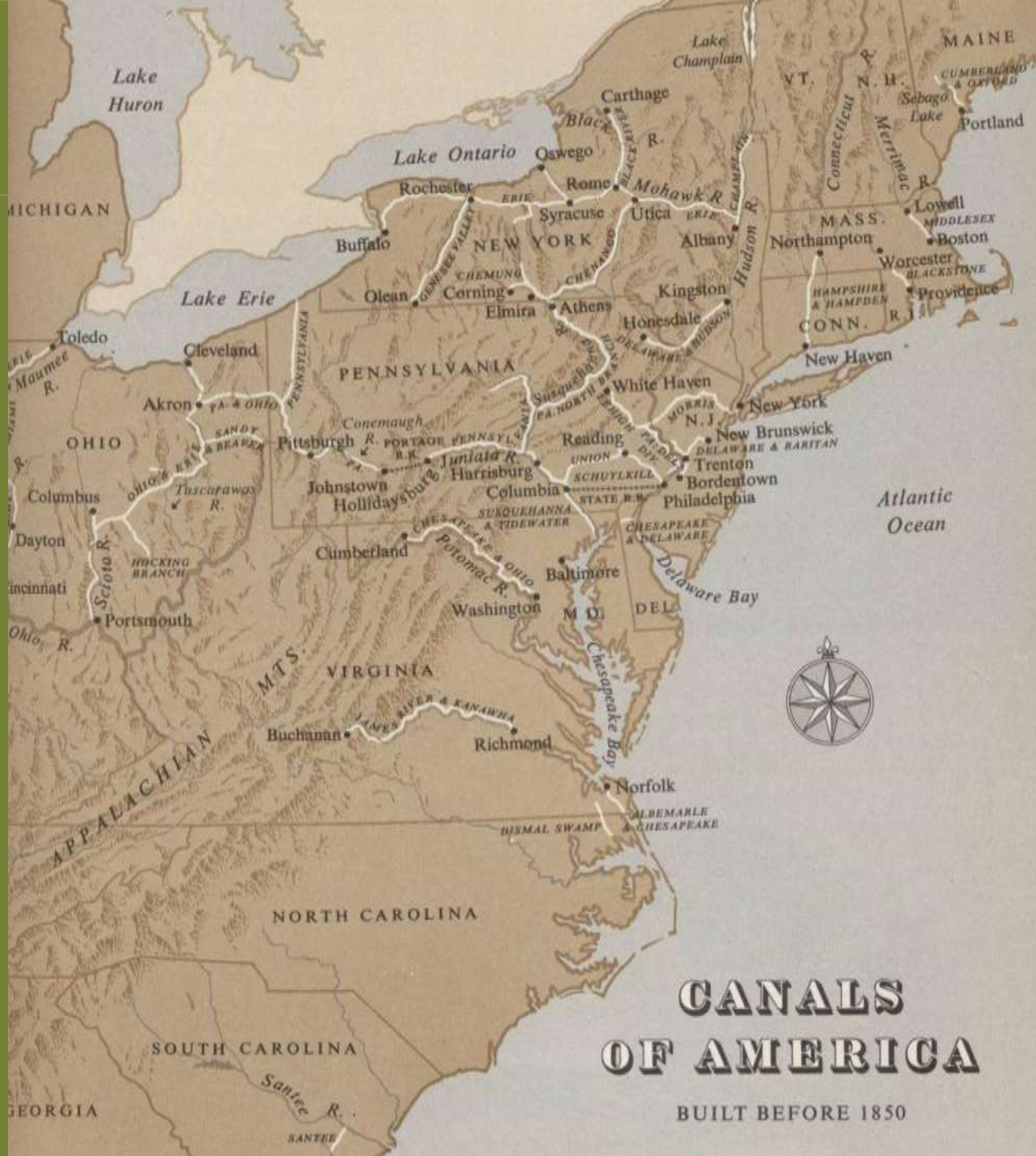
Grain –

From the Great Lakes at Buffalo



New York City





American
Canal Boom
1820-1850

Only 3 canals
paid for
themselves

Most were
abandoned by
1870s

CANALS OF AMERICA

BUILT BEFORE 1850

Erie Canal Enlargement 1836-1862



- 7' (2m) deep channel
- Double Locks
 - 110' (33.5 m) long
 - 18' (5.5 m) wide
 - 240 Ton Capacity
- Number of locks reduced from 86 to 71
- Overall length shortened from 363 to 350 miles

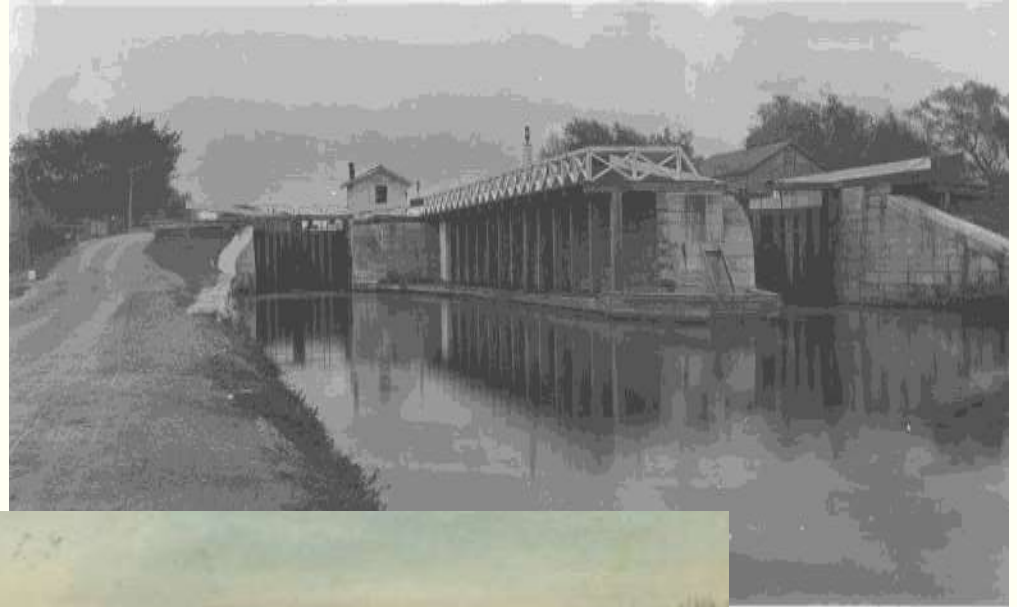


Lock 36, Little Falls

Locks Lengthened 1884-91



- One chamber extended to allow “Double-Headed” tows



Nine Million Dollar Improvement 1895

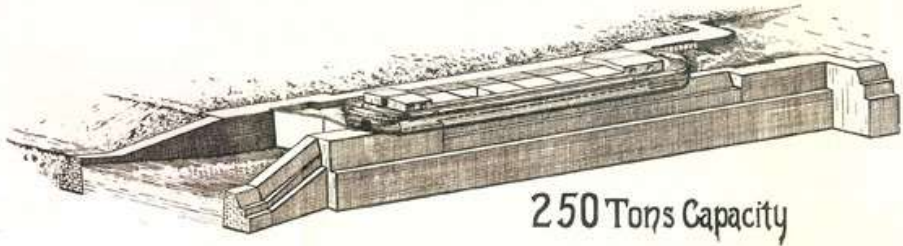




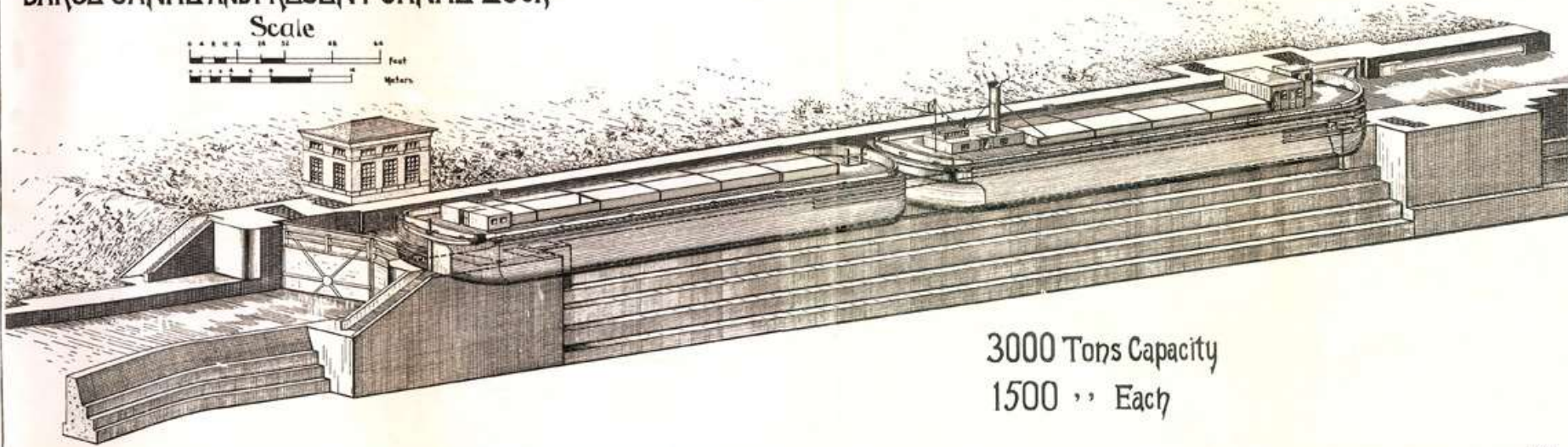
Ship Canal, Barge Canal, or Abandonment?

SKETCH
SHOWING
RELATIVE CAPACITIES
OF
BARGE CANAL AND PRESENT CANAL LOCK

Scale
feet
Meters



250 Tons Capacity



3000 Tons Capacity
1500 '' Each



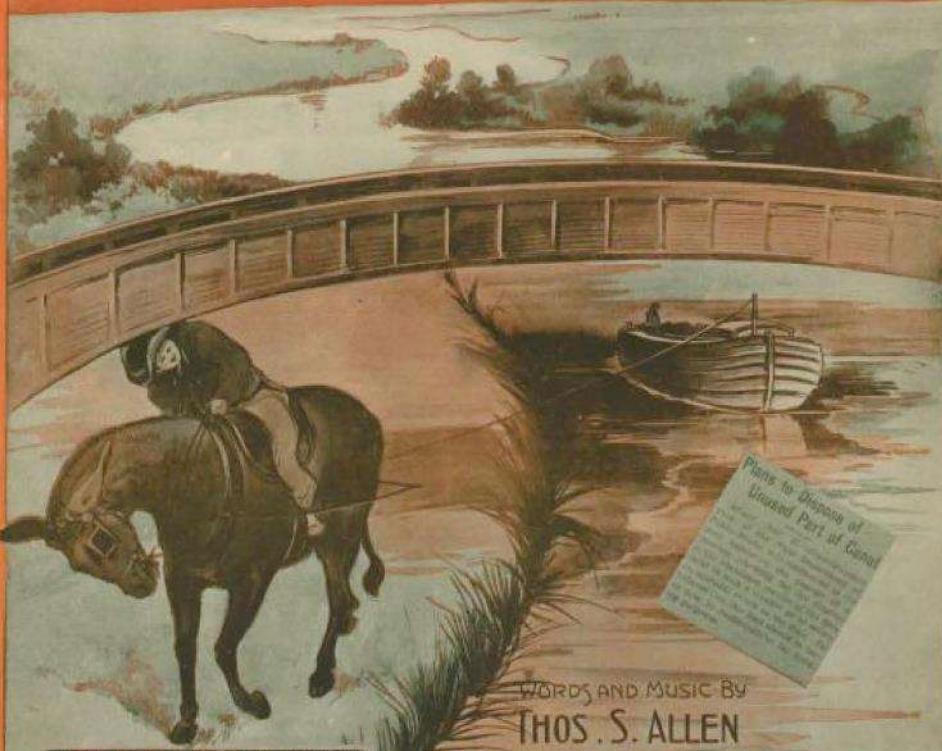
437 - Lock 17 - Little Falls.

9/15/21

LOW BRIDGE

EVERYBODY DOWN

(OR FIFTEEN YEARS ON THE ERIE CANAL)



Plans to Dispose of
 Unused Part of Canal

(Small, illegible text follows)

WORDS AND MUSIC BY
THOS. S. ALLEN

WRITER OF
 "BY THE WATER MELON VINE"
 "BIG CHIEF BATTLE-AXE"
 "MANDY-LOU" ETC

F. HAVILAND Pub. Co.
 NEW ZEALAND NEW YORK BROADWAY
 BUILDING 6 37th ST.



William Wall, *New York and the Erie Canal*, 1862.
Arkell Museum, Canajoharie



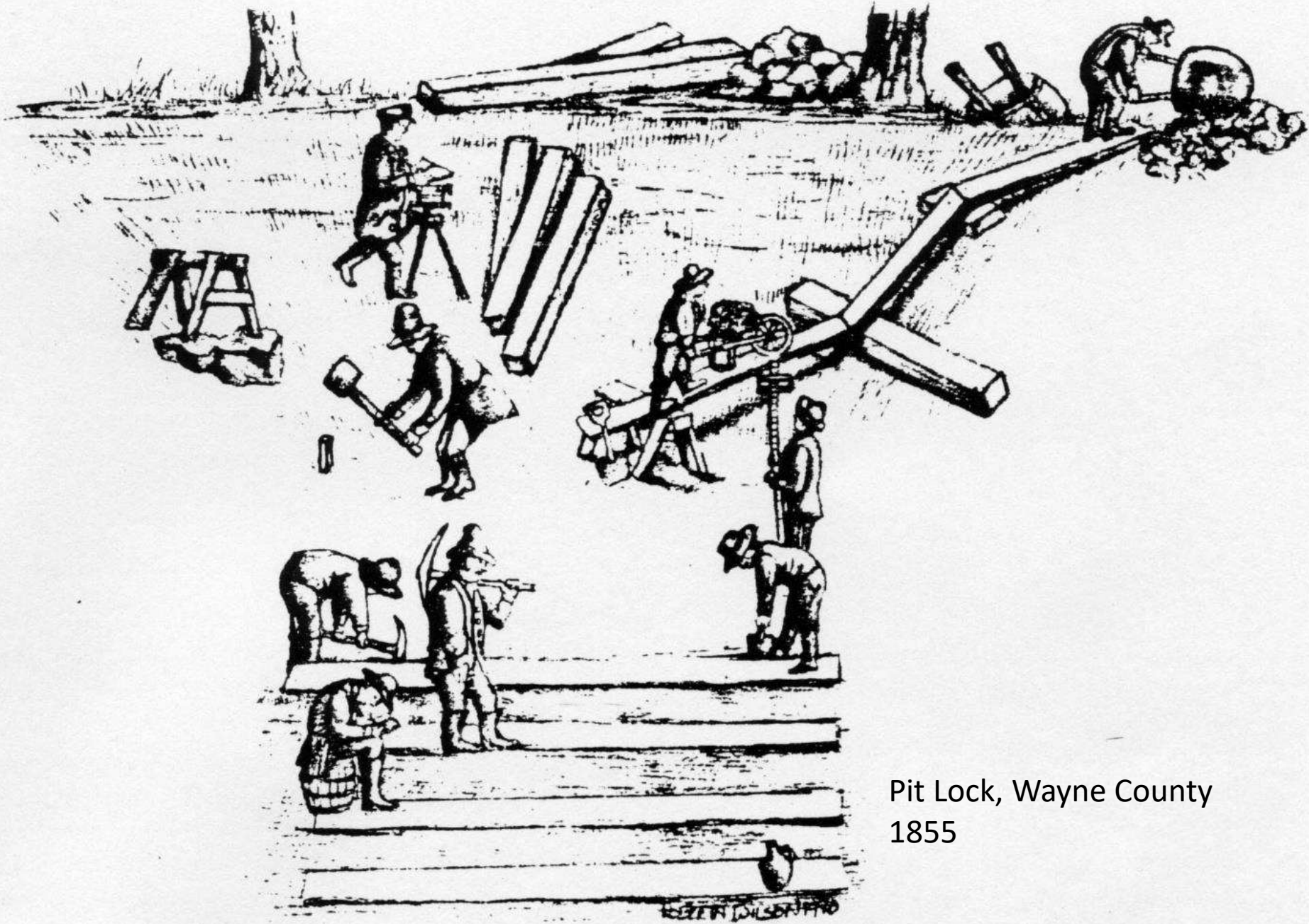
Barge Canal

Constructed 1905-18



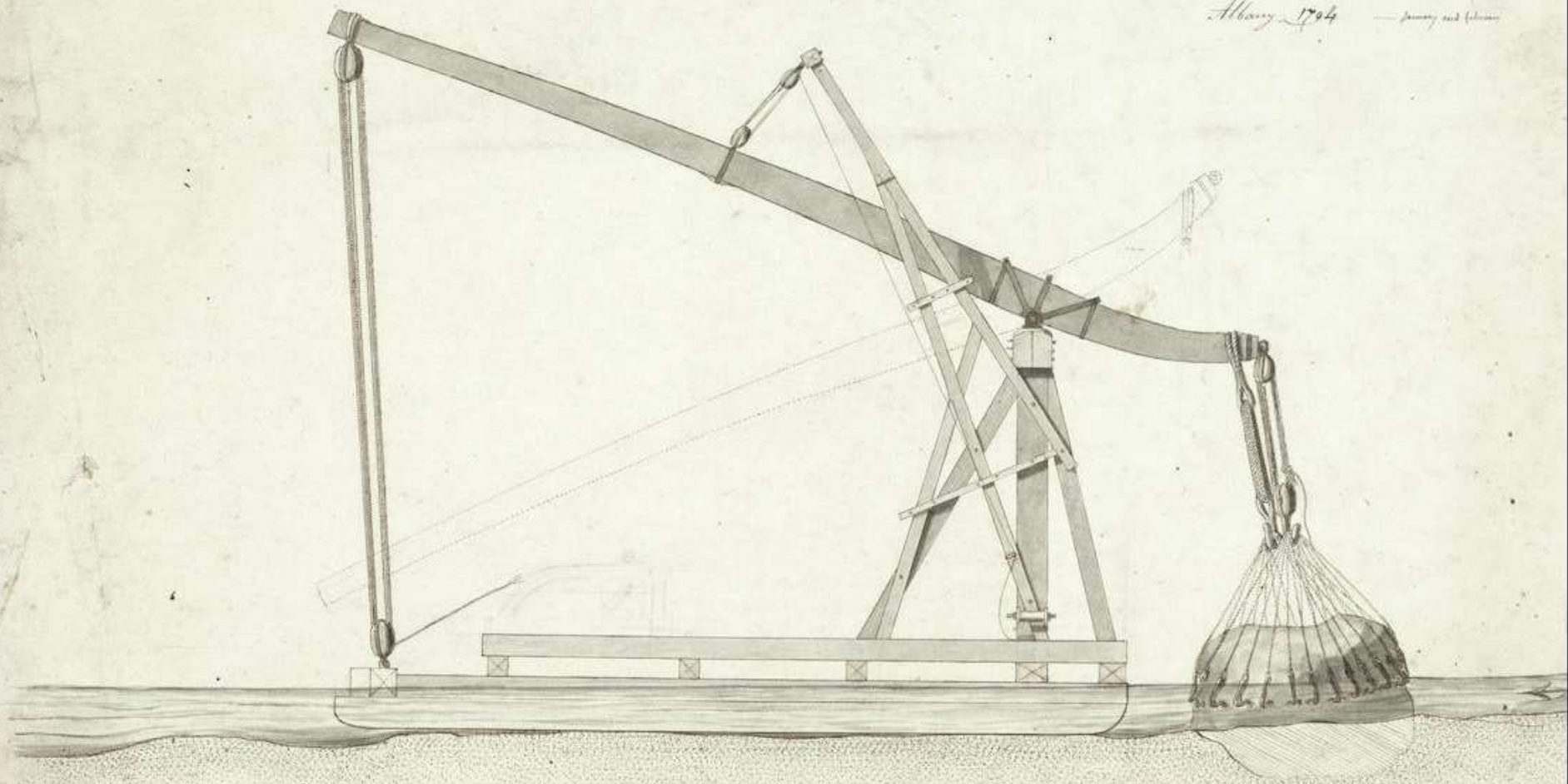
- Massive Lock Chambers
 - 310' long
 - 45' wide
 - Able to pass 200,000 ton vessels
 - Ten times the capacity of Enlarged Erie locks



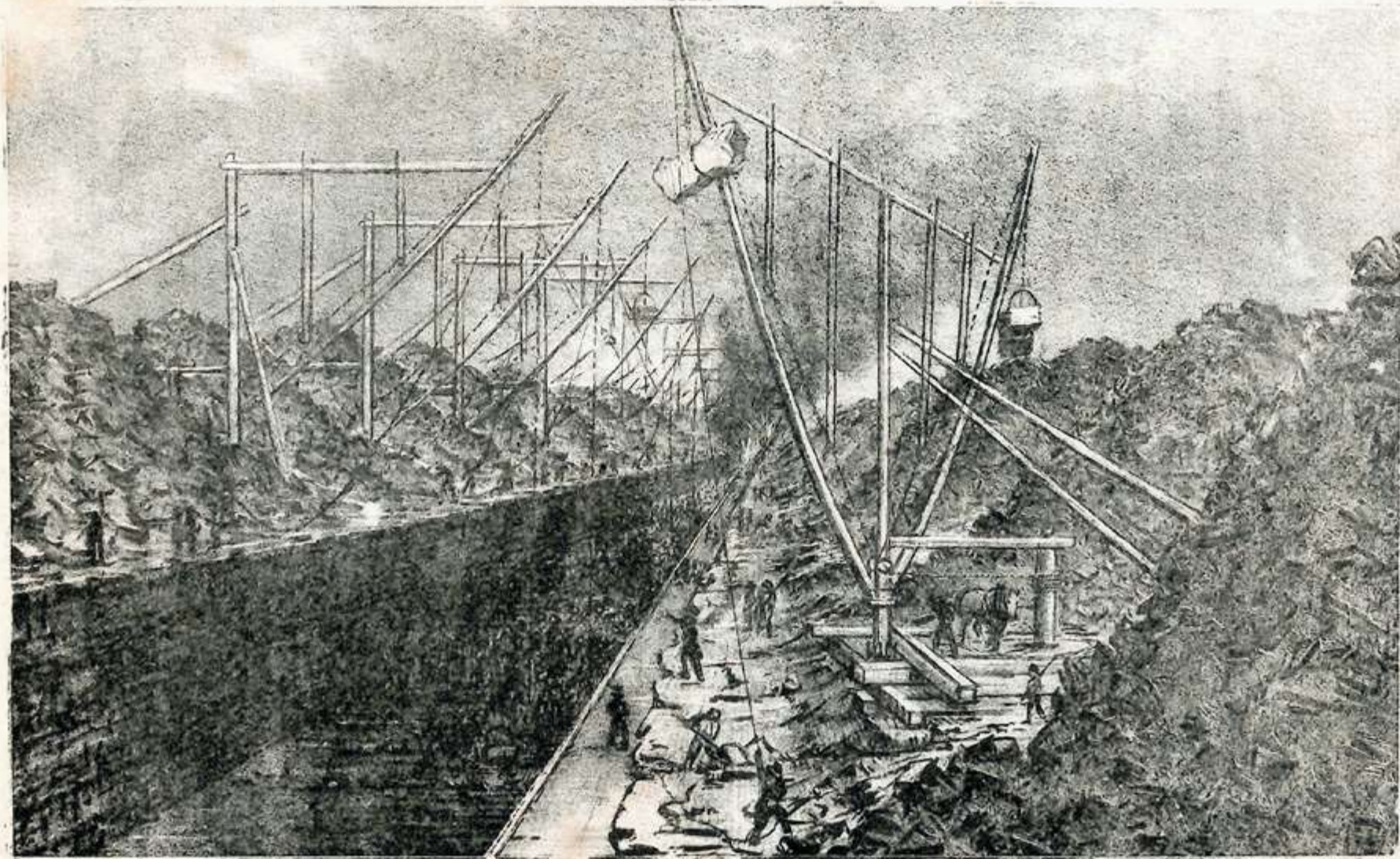


Pit Lock, Wayne County
1855

*Design of a Machine
intended for raising the Situations of
Wires and other in the Harbour.
Albany 1794 — James and Wilson*



United States



PROCESS OF EXCAVATION, LOCKPORT.

Deep Cut, Lockport, 1824



Canastota, 1895

Neg. 4. Contract No. 68
Dredge at work at Sta. 20, looking north at Northumbria
Jan. 1900



Neg. 1305 Contract 20-B
Dredging river channel near Mindenville
Oct. 25-10



Neg. #13-2796 View N. showing dipper dredge removing
rock at Orchard dam, June 30-13

COUNT OF CLAIMS

106

145/14

7/30/13

L. S. MOTTING

1913



2607

General view of hydraulic dredge "Champlain"
Contract No. 15 - Comstocks.
Photo taken by H. J. Richardson June 14, 1907.



Neg. #82. Contract #4. Hydraulic dredge at work at Sta. 6888,
Nov. 1, 1906.



Neg. 1445. View of cutters from under side on Hydraulic Dredge in
Operation on Contract No. 5,
September 1906.



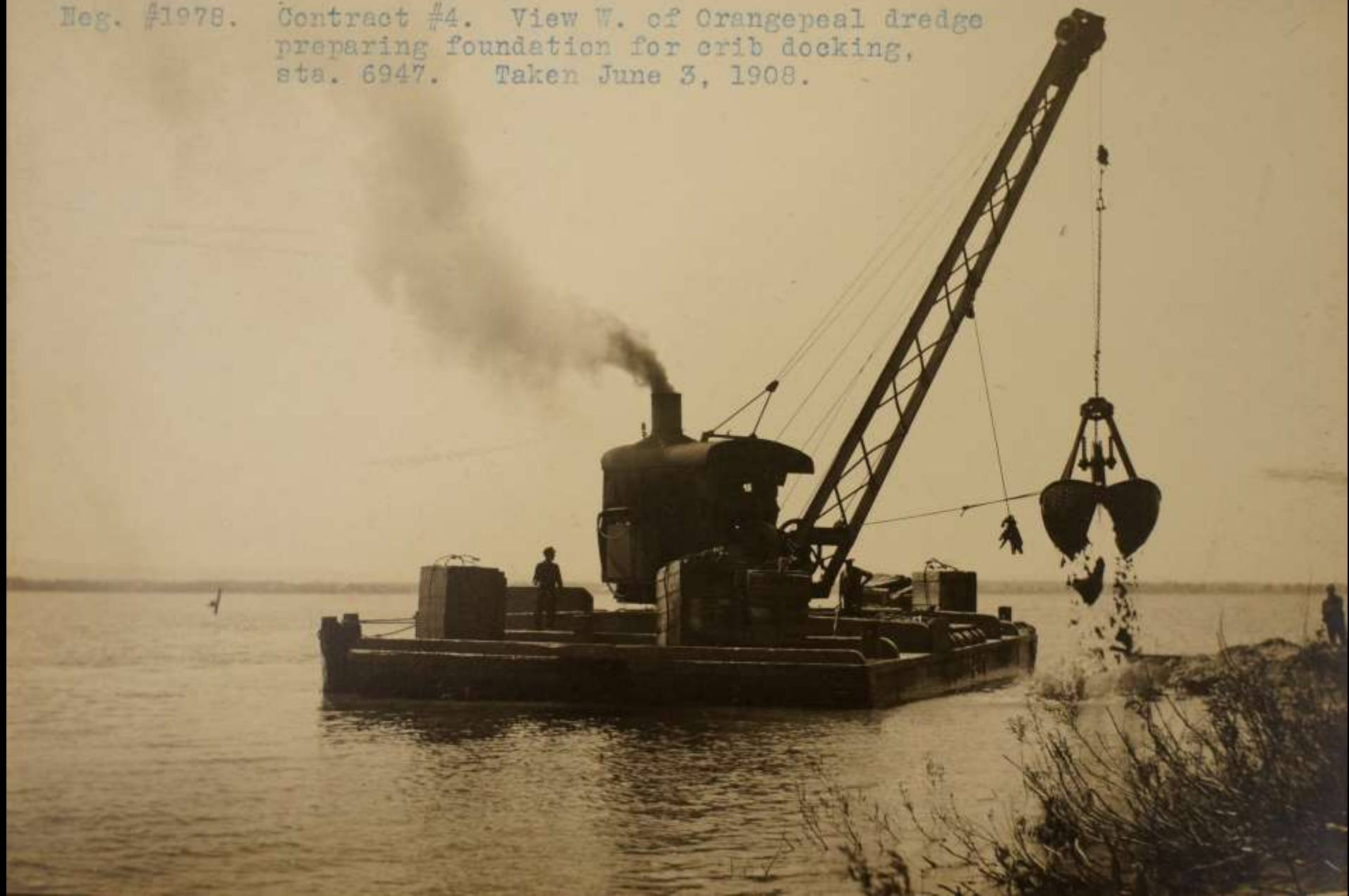
Neg. 7491 Contract 60
Ladder dredge and excavation of prism bend, Sta. 3228+50
Aug. 8-10



Neg. #12-2790 View of ladder dredge resuming work in
Brewerton cut. July 26-12



Neg. #1978. Contract #4. View W. of Orangepeal dredge
preparing foundation for crib docking,
sta. 6947. Taken June 3, 1908.



Neg.
1545.

Operat-
ing Room
to Dredge
on Cont.
No. 5.



Photo of discharge pipe from dredge "Champlain"
Contract No. 15 - Comstocks -
Photo taken by H. J. Richardson June 14, 1907.



Neg. 2664

Contract #15

Grader at work on Contract 15 south of Whitehall. building levees
to retain spoil from hydraulic dredge. July 2-08





Neg. 7286 Contract 61
Prism excavation, Lidgerwood #2, Sta. 3540 E.
May 12-10



Neg. 5878

Contract # 19

View at Sta. 6166+00 looking east.

June 30-08



Neg. #5. Contract #4. Looking W. from Sta. 6800, showing work of
Lubecker on prism excavation, Oct. 1, 1906.









Lock E9, Rotterdam Junction

Recreational Boating



Lock E15, Fort Plain, Montgomery County

Recreational Boating



Lock E15, Fort Plain, Montgomery County

Recreational Boating



Lock E15, Fort Plain, Montgomery County

NYS Canal System



NEW YORK
STATE OF
OPPORTUNITY.

Canal
Corporation



- Erie, Champlain, Oswego, Cayuga-Seneca canals
- 524 miles (326 km) of channel
- 57 Locks

Erie Canalway National Heritage Corridor



- 234 municipalities; 4,834 square miles; home to 2.7 million New Yorkers
- Part of 23 counties, eight regional planning board areas, and six NYS tourism regions

Barge Canal National Historic Landmark



- 57 locks
- 26 hydroelectric powerhouses
- 15 Gasoline powerhouses
- 13 moveable dams
- 6 Shops
- 4 Drydocks
- Fixed dams
- Wasteweirs & Spillways
- 22 Guard Gates
- 17 Lift bridges
- 285 Fixed bridges
- Terminal buildings
- 524 miles of channel
 - 154 miles land-cut
 - 370 miles channelized rivers & lakes

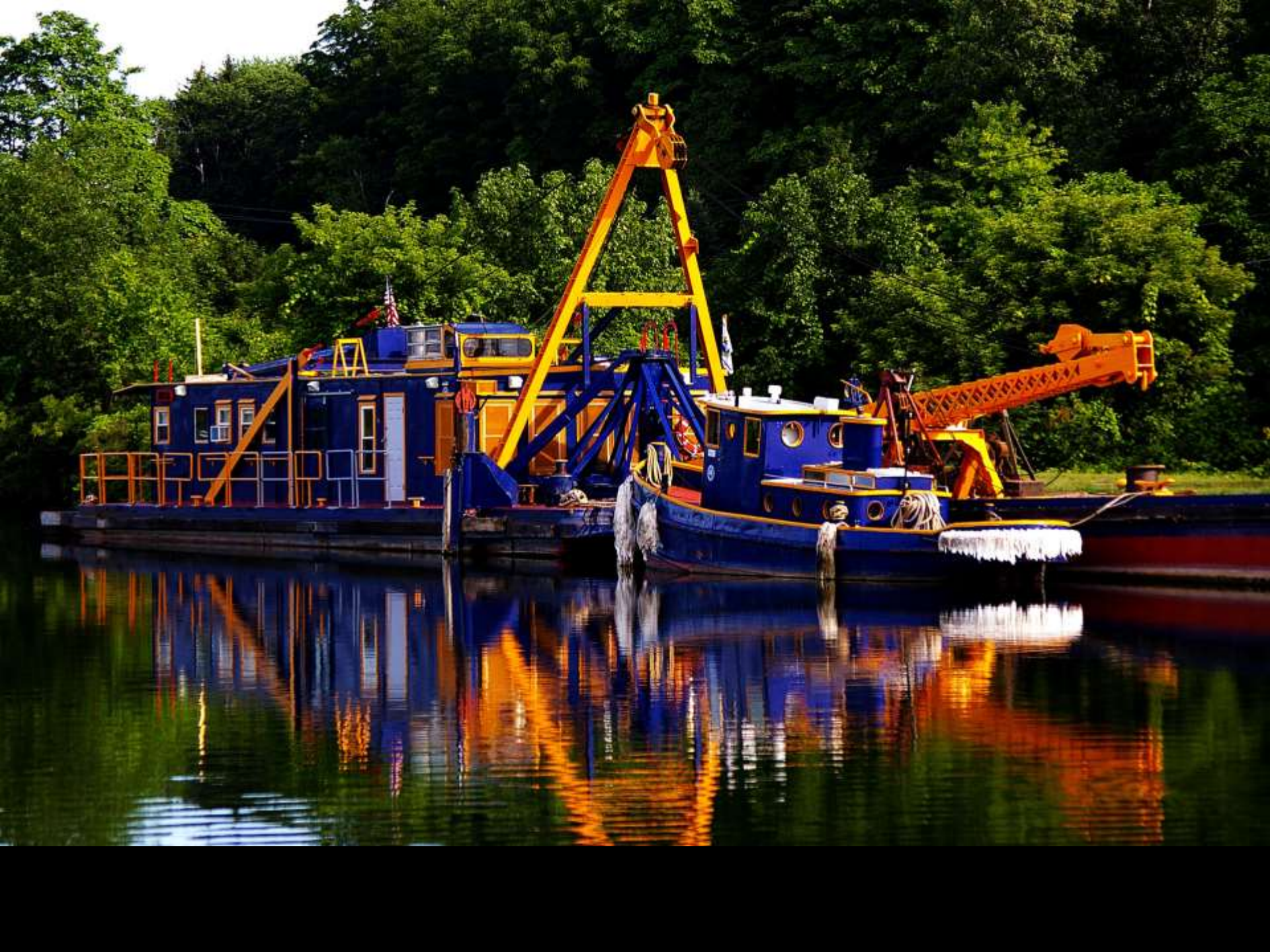


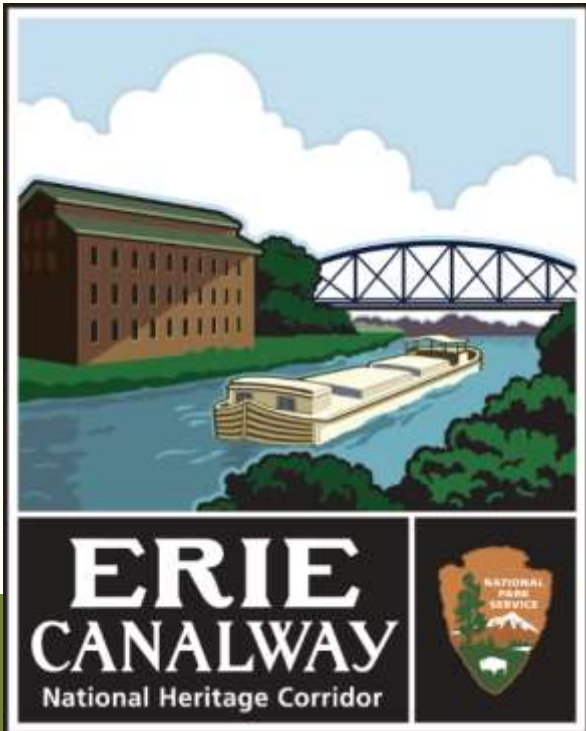
Derrick Boat #8
H. Lee White Maritime Museum
Oswego



Dipper Dredge #3, (ex. *St. Johnsville* 1911)
Hydraulic Dredge #3 (1927)

Lyons Drydock





ERIE
CANALWAY
National Heritage Corridor



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