

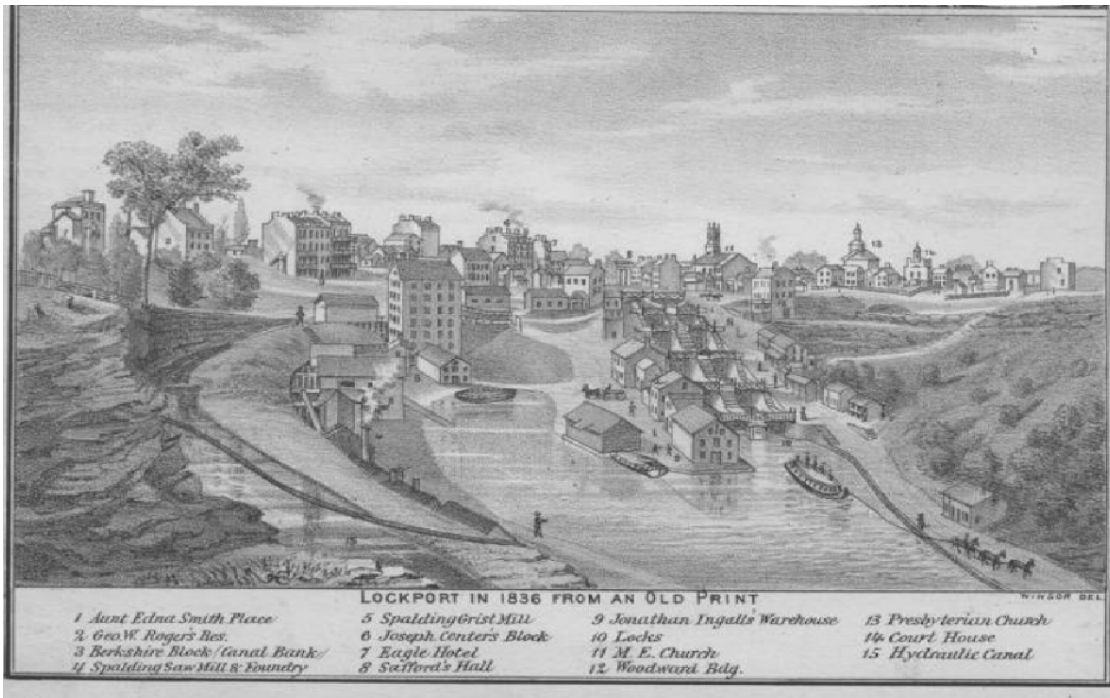


## 4th Grade

# In What Ways Did the Erie Canal Create Opportunities for People in New York to Make Important National Contributions?

## Supporting Questions

1. What were some engineering (technical) challenges, and who came up with innovative outcomes in building the Erie Canal?
2. What were some businesses that were created and/or grew in the Lockport area related to the building and operation of the Erie Canal, and who were the individuals leading these entrepreneurial enterprises?
3. How did the Lockport community benefit from some of the innovations in business and technology derived from the Erie Canal experience?



Lockport from an old print, 1836, in History of Niagara County, N.Y., with illustrations descriptive of its scenery, private residences, public buildings, fine blocks and important manufactories and portraits of old pioneers and prominent residents, 1878 in New York Heritage:

<https://cdm16694.contentdm.oclc.org/digital/collection/VVN001/id/840>



## 4th Grade INDUSTRIALIZATION, IMMIGRATION AND GROWTH: FROM THE EARLY 1800s TO THE PRESENT

### In What Ways Did the Erie Canal Create Opportunities for People in New York to Make Important National Contributions?

<b>New York State Social Studies Framework Key Idea &amp; Practices</b>	<p>4.6 INDUSTRIALIZATION, IMMIGRATION, AND GROWTH: FROM THE EARLY 1800S TO THE PRESENT: Economic activities in New York State are varied and have changed over time. Various individuals and groups have contributed to the growth and development of New York State. (Standards 1, 3, 4; Themes: MOV, TCC, GEO, ECO, TECH)</p> <p>4.6e Entrepreneurs and inventors associated with New York State have made important contributions to business and technology.</p> <p>Students will research people who made important contributions to business, technology, and New York State communities, particularly in relation to their connection to the Erie Canal</p> <p>Some people to consider include DeWitt Clinton, Nathan Roberts, Orange Dibble, Birdsill Holly, Jacob Schoellkopf, Nikola Tesla, George Westinghouse....</p> <ul style="list-style-type: none"> <li>✔ Chronological Reasoning and Causation</li> <li>✔ Gathering, Interpreting, and Using Evidence</li> <li>✔ Comparison and Contextualization</li> </ul>
<b>Staging the Question</b>	Discuss moving from ideas to action, and the value of problem solving in meeting basic needs and wants.

Supporting Question 1
What were some engineering (technical) challenges, and who came up with innovative outcomes to resolve them in building the Erie Canal?
Formative Performance Task
Identify the challenges (natural and manmade) of canal construction at this time: clearing land, keeping the canal level (locks).
Featured Sources
<p><b>Source A:</b></p> <p>An early stump puller on the grounds of the Camillus Erie Canal Park in Camillus, New York, which encompasses the first enlargement of the Erie Canal at its midpoint</p>

Supporting Question 2
What were some businesses that were created and/or grew in the Lockport area related to the building and operation of the Erie Canal, and who were the individuals leading these entrepreneurial enterprises?
Formative Performance Task
Describe how building the Erie Canal required certain technologies, skills, labor. How did these needs impact communities like Lockport? The natural environment?
Featured Sources
<p><b>Source A:</b></p> <p>Barrel making at cooper shop, Lockport NY c. 1900 Niagara County Historical Society</p>

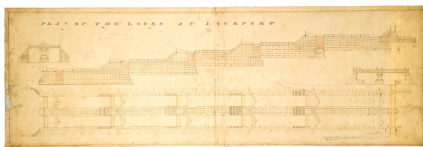
Supporting Question 3
How did the Lockport community benefit from some of the innovations in business and technology derived from the Erie Canal experience?
Formative Performance Task
Explain how the economic growth of communities like Lockport was impacted by the presence of the Erie Canal. What innovations were developed to respond to the growth?
Featured Sources
<p><b>Source A:</b></p> <p>Getting apples ready for shipment on the Erie Canal, Lockport NY, early 20th century Niagara County Historical Society</p>



<https://www.loc.gov/item/2018700237/>

**Source B:**

Plan of the Locks at Lockport, 1835-1842  
Niagara County Historical Society



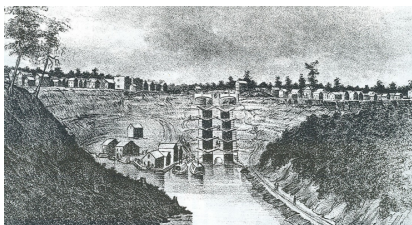
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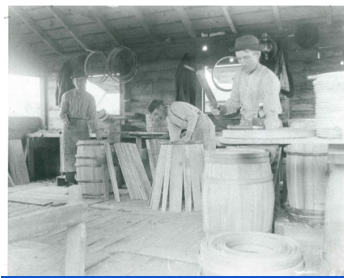
New York State Archives

<http://digitalcollections.archives.nysed.gov/index.php/Detail/objects/41231>

Completed Flight of Five Double Locks on the Erie Canal at Lockport, c.1825  
*Memoir at the Celebration of the Completion of the New York Canals*, Cadwallader D. Colden, Published by W. A. Davis, New York, 1825



<https://www.eriecanal.org/images/Lockport-1/Lockport-1825.jpg>



(click the image to enlarge)

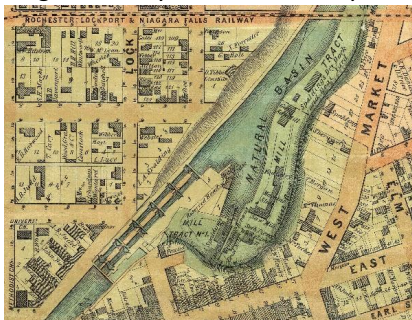
**Source B:**



<https://cdm16694.contentdm.oclc.org/digital/collection/p16694coll2/id/704/rec/521>

**Source C:**

Map of the mills in the Locks District. This shows how the surplus water from the canal was diverted for use in powering the mills.  
Niagara County Historical Society



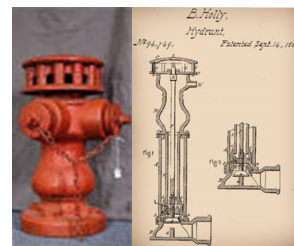
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**Source B:**

Double Valve Fire Hydrant invented and manufactured by Holly Manufacturing Company in Lockport, N.Y. and Birdsill Holly patent for a fire hydrant (1869)



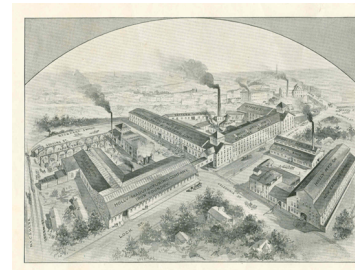
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**Source C:**

Holly Manufacturing Company, Lockport NY c. 1875  
Niagara County Historical Society



(click the image to enlarge)



**Source C:**

Process of Evacuation, Lockport  
*Memoir at the Celebration of the Completion of the New York Canals,*  
 Cadwallader D. Colden, Published by  
 W. A. Davis, New York, 1825



Section of Erie Canal, one thousand feet, West of Lockport  
 This "mountain ridge" was considered the most difficult work of the original canal. Here was struck the last link  
 just prior to the celebration at the formal opening on October 26, 1825. From a print in Colden's Memoir.

<https://www.eriecanal.org/images/Lockport-1/Lockport-excavation.jpg>

**Source D:**

Image of completed Erie Canal through  
 the Deep Cut stone corridor west of  
 Lockport on the way to Buffalo, c.1825



[https://www.eriecanal.org/images/Lockport-1/Lockport-deep\\_cut.jpg](https://www.eriecanal.org/images/Lockport-1/Lockport-deep_cut.jpg)

**Source D:**

Transit Street Bridge area, west of the  
 Bridge. Ca 1947 (shows lumber  
 company buildings)



Transit Street Bridge area, west of the  
 Bridge. Ca 1947 (shows lumber  
 company buildings)

<https://cdm16694.contentdm.oclc.org/digital/collection/p15004coll9/id/239/rec/2>

**Source D:**

Panoramic view of the Locks at  
 Lockport c. 1900  
 Niagara County Historical Society



(click the image to enlarge)

**Summative  
 Performance  
 Task**

**ARGUMENT** Students make an argument about the transformative nature of the Erie Canal on local communities like Lockport, New York, including making inferences of potential positive and negative features of innovations in business and labor.

**EXTENSION** Students find and examine examples of changes in advertising from the mid-19<sup>th</sup> century to the present and create a collage of inferred negative and positive features.