

THE INDUSTRIAL REVOLUTION IN THE UNITED STATES

The Industrial Revolution took place over more than a century, as production of goods moved from home businesses, where products were generally crafted by hand, to machine-aided production in factories. This revolution, which involved major changes in transportation, manufacturing, and communications, transformed the daily lives of Americans as much as—and arguably more than—any single event in U.S. history.



Breaker boys, Woodward Coal Mines
<http://www.loc.gov/pictures/item/det1994007312/PP/>

HISTORICAL BACKGROUND

An early landmark moment in the Industrial Revolution came near the end of the eighteenth century, when Samuel Slater brought new manufacturing technologies from Britain to the United States and founded the first U.S. cotton mill in Beverly, Massachusetts. Slater's mill, like many of the mills and factories that sprang up in the next few decades, was powered by water, which confined industrial development to the northeast at first. The concentration of industry in the Northeast also facilitated the development of transportation systems such as railroads and canals, which encouraged commerce and trade.

The technological innovation that would come to mark the United States in the nineteenth century began to show itself with Robert Fulton's establishment of steamboat service on the Hudson River, Samuel F. B. Morse's invention of the telegraph, and Elias Howe's invention of the sewing machine, all before the Civil War. Following the Civil War, industrialization in the

United States increased at a breakneck pace. This period, encompassing most of the second half of the nineteenth century, has been called the Second Industrial Revolution or the American Industrial Revolution. Over the first half of the century, the country expanded greatly, and the new territory was rich in natural resources. Completing the first transcontinental railroad in 1869 was a major milestone, making it easier to transport people, raw materials, and products. The United States also had vast human resources: between 1860 and 1900, fourteen million immigrants came to the country, providing workers for an array of industries.

The American industrialists overseeing this expansion were ready to take risks to make their businesses successful. Andrew Carnegie established the first steel mills in the U.S. to use the British "Bessemer process" for mass producing steel, becoming a titan of the steel industry in the process. He acquired business interests in the mines

that produced the raw material for steel, the mills and ovens that created the final product and the railroads and shipping lines that transported the goods, thus controlling every aspect of the steel-making process.

Other industrialists, including John D. Rockefeller, merged the operations of many large companies to form a trust. Rockefeller's Standard Oil Trust came to monopolize 90% of the industry, severely limiting competition. These monopolies were often accused of



John D. Rockefeller, full-length portrait, walking on street with John D. Rockefeller, Jr.
<http://www.loc.gov/pictures/resource/cph.3a48646/>

intimidating smaller businesses and competitors in order to maintain high prices and profits. Economic influence gave these industrial magnates significant political clout as well. The U.S. government adopted policies that supported industrial development such as providing land for the construction of railroads and maintaining high tariffs to protect American industry from foreign competition.

American inventors like Alexander Graham Bell and Thomas Alva Edison created a long list of new technologies that improved communication, transportation, and industrial production. Edison made improvements to existing technologies, including the telegraph while also creating revolutionary new technologies such as the light bulb, the phonograph, the kinetograph, and the electric dynamo. Bell, meanwhile, explored new speaking and hearing technologies, and became known as the inventor of the telephone.

For millions of working Americans, the industrial revolution changed the very nature of their daily work. Previously, they might have worked for

themselves at home, in a small shop, or outdoors, crafting raw materials into products, or growing a crop from seed to table. When they took factory jobs, they were working for a large company. The repetitive work often involved only one small step in the manufacturing process, so the worker did not see or appreciate what was being made; the work was often dangerous and performed in unsanitary conditions. Some women entered the work force, as did many children. Child labor became a major issue.

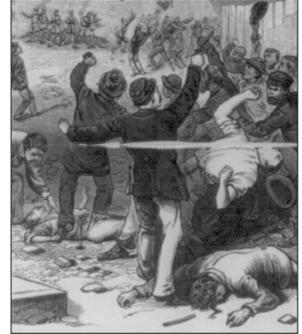
Dangerous working conditions, long hours, and concern over wages and child labor contributed to the growth of labor unions. In the decades after the Civil War, workers organized strikes and work stoppages that helped to publicize their problems. One especially significant labor upheaval was the Great Railroad Strike of 1877. Wage cuts in the railroad industry led to the strike, which began in West Virginia and spread to three additional states over a period of 45 days before being violently ended by a combination of vigilantes, National Guardsmen, and federal troops. Similar episodes occurred more frequently in the following decades as workers organized and asserted themselves against perceived injustices.

The new jobs for the working class were in the cities. Thus, the Industrial Revolution began the transition of the United States from a rural to an urban society. Young people raised on farms saw greater opportunities in the cities and moved there, as did millions of immigrants from Europe. Providing housing for all the new residents of cities was a problem, and many workers found themselves living in urban slums; open sewers ran alongside the streets, and the water supply was often tainted, causing disease. These deplorable urban conditions gave rise to the Progressive Movement in the early twentieth century; the result would be many new laws to protect and support people, eventually changing the relationship between government and the people.

SUGGESTIONS FOR TEACHERS

The Industrial Revolution is a complex set of economic, technological, and social changes that occurred over a substantial period of time. Teachers should consider the documents in this collection as tools for stimulating student thinking about aspects of the Industrial Revolution.

- After providing a definition of the Industrial Revolution and explaining the time span across which it took place, teachers might supply small groups of students with a set of the documents in this primary source set. Students can categorize the documents by whether they provide information about what happened, why it happened, or its effects. Some documents may fit into more than one category. When small groups have completed their work, the teacher can facilitate creating a class list of events of the Industrial Revolution, causes (or supporting factors), and effects. Students may search the Library’s online collections to find additional evidence to support the causes and effects on the class chart.



The great railroad strike of July 1877
<http://www.loc.gov/pictures/item/2007675388/>

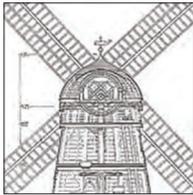
- Using the documents in this primary source set, students can create a timeline of important events in the Industrial Revolution. The last document in the set is dated 1919. Was the Industrial Revolution over by 1919? Challenge students to find evidence in the Library of Congress digital collections to support their answer (there are documents that suggest industrialization in the South was still taking place into the 1930s).
- Understanding a historical event as it was experienced by those who lived through it is an important skill of historical thinking—and one that can be difficult to develop. Teachers may challenge students to study documents in the collection to identify varied perspectives on the changes brought by the Industrial Revolution, as experienced by people of the day. Would students classify the responses as mainly positive, mainly negative, or about equally divided? How did people respond to what they perceived as negative effects of the Industrial Revolution?
- In 1893, Chicago hosted the World’s Columbian Exposition, which highlighted achievements of the United States and other nations in a variety of fields, including manufacturing and technology. An entire building was devoted to electricity. Using the primary source set as a starting point, ask students to design an exhibit about the development of American industry for the World’s Columbian Exposition.

ADDITIONAL RESOURCES



Alexander Graham Bell Family Papers at the Library of Congress

<http://www.loc.gov/collections/alexander-graham-bell-papers/about-this-collection/>



Built in America

<http://www.loc.gov/pictures/collection/hh/>



Detroit Publishing Company

<http://www.loc.gov/pictures/collection/det/>



Inside an American Factory: Films of the Westinghouse Works

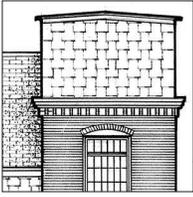
<http://www.loc.gov/collection/films-of-westinghouse-works-1904/about-this-collection/>



National Child Labor Committee Collection

<http://www.loc.gov/pictures/collection/nclc/>

PRIMARY SOURCES WITH CITATIONS



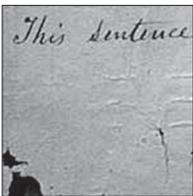
"Lippitt Mill, 825 Main Street, West Warwick, Kent County, RI." Drawing. Washington, DC: National Park Service Historic American Buildings Survey, documentation compiled after 1933. From Library of Congress, *Built in America*.

<http://www.loc.gov/pictures/item/ri0025.sheet.00003a/>



"The Workers' Anvil." Song sheet. Rochester: Griffing, W. D., 1878. From Library of Congress, American 19th Century Sheet Music.

<http://www.loc.gov/item/sm1878.08687>



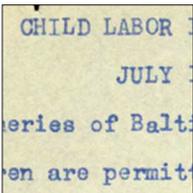
Morse, Samuel F.B. "First Telegraphic Message---24 May 1844." Photograph. From Library of Congress, The Samuel F.B. Morse Papers at the Library of Congress.

<http://memory.loc.gov/cgi-bin/ampage?collId=mmorse&fileName=071/071009/071009page.db&recNum=0>



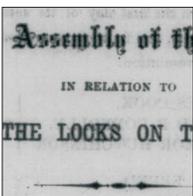
Edgerton, James A. "93, 402,151 Now Live on Uncle Sam's Land," *The Bemidji daily pioneer*. 16 Dec. 1910. From Library of Congress, *Chronicling America: Historic American Newspapers*.

<http://chroniclingamerica.loc.gov/lccn/sn86063381/1910-12-16/ed-1/seq-7/>



Hine, Lewis. "Child Labor in the Canning Industry of Maryland." 1909. From Library of Congress, Manuscripts Division. Found in: *National Child Labor Committee Collection*.

<http://www.loc.gov/pictures/static/data/nclc/resources/images/canneries3.pdf>



New York Legislature. "Resolution on Enlarging the Locks of the Erie Canal." Albany, NY: New York Legislature: April 1863.

From Library of Congress, *The Abraham Lincoln Papers at the Library of Congress*.

<http://memory.loc.gov/cgi-bin/ampage?collId=mal&fileName=mal1/265/2653900/malpage.db&recNum=0>



"New Map of the Union Pacific Railway, the Short, Quick and Safe Line to All Points West." Map. Chicago: Rand McNally, 1883. From Library of Congress, *Map Collections*.

<http://www.loc.gov/item/98688838/>



Elliot, Joseph E.B., creator. "70. GROUND FLOOR, SOUTHWEST TURBINE - Slater Mill, Pawtucket, Providence County, RI." Photograph. 1991. From Library of Congress: *Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscapes Survey*.

<http://www.loc.gov/pictures/item/ri0102.color.570695c/>



"Nursery Rhymes for Infant Industries, No. 15: 'O' is the Oil Trust, a modern Bill Sikes; he defies the police, and does just as he likes." 1901. From Library of Congress, Prints and Photographs Division

<http://www.loc.gov/pictures/item/2005685052/>



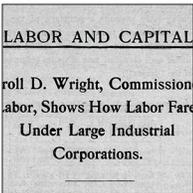
"Something New Starts Every Day." Song sheet. Boston, MA: Leonard Deming, n.d. From Library of Congress, *America Singing: Nineteenth-Century Song Sheets*.

<http://www.loc.gov/item/amss.as112730>



"Solvay Process Co.'s Works, Syracuse." Photograph. Detroit, MI: Detroit Publishing Company, created/published between 1890 and 1901. From Library of Congress, *Touring Turn-of-the-Century America: Photographs from the Detroit Publishing Company, 1880-1920*.

<http://www.loc.gov/pictures/item/det1994007647/PP/>



Wright, Carroll D. "Labor and Capital." Chicago, IL: Allied Printing, 1900. From Library of Congress, *An American Time Capsule: Three Centuries of Broadsides and Other Printed Ephemera*.

<http://hdl.loc.gov/loc.rbc/rbpe.01804500>



"Breaker Boys, Woodward Coal Mines, Kingston, Pa." Photograph. Detroit: Detroit Publishing Co., 1900. From Library of Congress, *Touring Turn-of-the-Century America: Photographs from the Detroit Publishing Company, 1880-1920*.

<http://www.loc.gov/pictures/item/det1994007312/PP/>



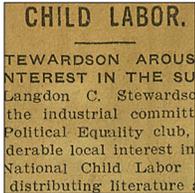
Excavating for a New York Foundation. Film. United States: American Mutoscope and Biograph Co., 1903. From Library of Congress, *The Life of a City: Early Films of New York, 1898-1906*. RAM, MPEG, MOV.

<http://www.loc.gov/item/00694384>



Taping Coils: Westinghouse Works. Film. United States: American Mutoscope and Biograph Co., 1904. From Library of Congress, *Inside an American Factory: Films of the Westinghouse Works, 1904.* RAM, MPEG, MOV.

<http://www.loc.gov/item/96522213>



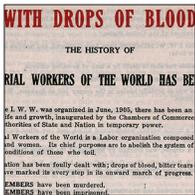
"Mrs. Langdon Stewardson Requests Funds for National Child Labor Committee." April 24, 1905. From Library of Congress, *Miller NAWSA Suffrage Scrapbooks, 1897-1911.*

<http://hdl.loc.gov/loc.rbc/rbcmil.scrp2002603>



"[Assembly]." Photograph. Detroit: Detroit Publishing Co., 1923. From Library of Congress, Prints and Photographs Online Catalog.

<http://www.loc.gov/pictures/item/det1994003109/PP/>



Haywood, William. "With Drops of Blood: The History of the Industrial Workers of the World Has Been Written." Chicago, IL: Industrial Workers of the World, 1919. From Library of Congress, *An American Time Capsule: Three Centuries of Broadsides and Other Printed Ephemera.*

<http://hdl.loc.gov/loc.rbc/rbpe.01805500>