
The Industrial Revolution

An Introduction



The world's first iron bridge at Coalbrookdale in England.

Iron, Cast Iron, and Innovation

The iron bridge built at Coalbrookdale in England (left) was made of cast iron. Iron, melted down from iron ore, has been widely used to create many objects for about three thousand years. However, bridges were generally constructed of stone, brick, or wood. Late in the 18th century, Abraham Darby of England decided that iron cast in molds could be used in construction. Coalbrookdale was in a coal mining area: naysayers did not believe an iron bridge could support heavy loads of coal. They were proven wrong. Darby built his bridge and it is still in use today. Since 1779 cast iron has been used to construct many bridges and buildings.

The Industrial Revolution Comes to Canada

The Industrial Revolution came to Canada, but it did not develop as early as it had in Britain. Late in the 18th century and early in the 19th, Canadians relied on farming, fishing, and the fur trade to earn a living. Factories did come later, especially after a high number of British settlers arrived here in the first half of the 1800's. With a larger manufacturing sector, factories could succeed. The same pattern happened in Canada that occurred in Britain: people moved from producing their own goods and food to depending on owners of industry to provide them with a job. A job had set wages and set times to work and often the conditions were poor and job security did not exist.

Before Confederation in 1867 what we now call Canada was a collection of British colonies. The colonies of the great British Empire were expected to supply raw material to the "mother country" so that the people of Britain could manufacture goods. By the middle of the 19th century though, industrialization had begun to take shape in the four colonies that would make up Canada in 1867: Nova Scotia, New Brunswick, Quebec, and Ontario.

By the end of the 1800's the Canadian Industrial Revolution was in the full swing. Factories were well established and "new-fangled" ideas related to manufacturing and marketing were introduced. Soon fish processing plants, textile mills, breweries, and shipbuilding adopted the new ideas and thrived.



An old photo of the pulp and paper mill at Bromptonville, Quebec: established in 1854 and operated late into the 1900's.

Industrialization in Canadian Cities

By the end of the 1800's, Montreal was an industrialized city. It had a busy port and was part of a canal network. The canal system in North America had been built in the second half of the nineteenth century. The canals were very important for trade, to get goods from where they were made to their markets. Montreal also had major steel companies. In 1910 five of them combined and moved to Hamilton, in southern Ontario. This city then became one of Canada's important centres of industry.

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The Industrial Revolution: Women and Children



During the 19th century in Britain, many women went to work in the textile mills. The industrialization of Britain meant that there was a mass movement from the countryside to the growing cities, particularly in the northern mill towns. Just to make ends women took jobs but were generally paid less than men for doing similar work. Some women still worked at home, doing "piece work" being paid a small amount for each item they created. Children often worked at home too; often the whole family spent the hours of daylight doing tedious work just to make enough "get by".

Children worked in the mills and boys worked in the coal mines. Many girls found work in the mills, doing simple tasks. They worked long hours and few of them attended school. As time went on though, people began to realize the children were being exploited. Laws were passed to limit the hours they could work. In the 1880's Britain introduced compulsory education for children.

A similar situation occurred in the United States when industrialization took hold. Many textile mills sprung up in New England and young teenage girls and young women were hired, offering them some independence.

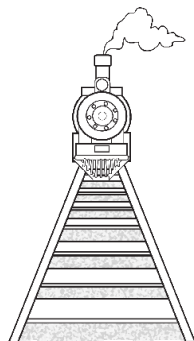
Textile work was hard on both sides of the Atlantic Ocean and employers did not always treat their workers well. In the long run, though, the changes in employment opportunities meant people left their homes and worked for others, as most people do today.

The Industrial Revolution: Transportation

Before the development of the railway travel on land was by foot or using a horse (either by riding one or by hitching horses to a wheeled vehicle). Most poor people travelled by foot, and going from one town to another was time-consuming and tiring. Moving goods from one place to another was a challenge.

The gradual development of a working steam engine occurred in England in the 1700's. Locomotives, railway cars, and railway lines were built. The trains ran short distances, hauling goods or passengers from one town to another.

After Confederation Canadian politicians realized that if Canada was to succeed as a country, a railway that stretched from one end to the other was needed. The completion of the railway in 1885 was a great boost for Canada and its economy.



The Industrial Revolution Timeline

- 1733** Textiles: John Kay invents the flying shuttle
- 1763** James Watt of Scotland makes the first workable steam engine
- 1767** Textiles: James Hargreaves invents the spinning Jenny
- 1790** Samuel Slater opens a textile mill in the United States
- 1825** The world's first railway line is laid, in England
- 1832** The Rideau Canal system opens
- 1836** The first railway line in Canada is laid, from La Prairie, Quebec to St. Jean, Quebec
- 1876** Alexander Graham Bell invents the telephone; the first long distance calls were made in Brantford, Ontario and the surrounding area
- 1885** A railway from Montreal to Port Moody, BC is completed
- 1908** Henry Ford makes his first Model-T car

Understanding the Text: The Industrial Revolution, An Introduction Pages 3 and 4

Answer the questions below after reading pages 3 and 4.

1. Who was Abraham Darby and why is he an important figure of the Industrial Revolution?

2. Explain why the Industrial Revolution did not occur at the same time in the Canada as it did in Britain.

3. Give some examples (some will be your own) that support why Canada's natural resources and geography played an important part in the country's industrialization.

4. A textile mill job in the 19th century was low-paying. Why do you think so many people were involved in such work in the 19th century?

5. What was a major change to the work place that happened during the Industrial Revolution? How do you think that change might be changing again in the 21st century?

6. Why were the changes in transportation so important during and after the Industrial Revolution?
