Chapter 1
1840-1896: The Formation of the Canadian Federal System
Section 6: The First Phase of Industrialization
The First Phase of Industrialization:
Pages 56-61
Industrialization: what does that mean?

- What does the word “industrialization” mean to you?
  - Factories
  - Machines
  - Mass production
  - Workers/labour
  - Products/goods
  - Efficient/fast
  - Profit/money
Background

• The first phase of industrialization took place from around 1850 to 1896
• Before the 1st phase of industrialization → goods were made by artisans/craftspeople
• Artisans/ crafts people: someone who made a good BY HAND, most of the time from start to finish
• Production was slow → only a few goods made each day depending on how complex (shoes for example were complex)
• Goods could be expensive to buy because of the slow process and craftsmanship
Background

Part of a cartoon depicting an artisan at work making a shoe

Background

- Invention of the **steam engine** in the late 1700s transformed industry and the production of goods in Europe and eventually in North America.
- The steam engine ran on coal power and it provided consistent energy.
- The engine would be adapted to create machines that could make fabric, make items out of metal and cut lumber (and other tasks too).
- These machines would replace some jobs performed by people.
Coal that was used to burn and create energy

Example of a steam engine invented by James Watt


Coal is ‘lit’!

The start of the First Phase of Industrialization
Background

Full cartoon depicting the difference between artisans and industrial production

Using the steam engine in industry helped create a scenario where goods were made quickly and in large quantities.

In addition, the steam engine was used in locomotives (trains) and on steamboat ships to provide them with power to run.

The creation and utilization of the steam engine for industrial purposes kicked off the 1st phase of industrialization in Canada.
1st Phase of industrialization

• When?
  – Approximately 1850-1896
• Where?
  – In URBAN AREAS
  – Montreal (close to the water and railways)
  – Quebec City
  – IN FACTORIES
• What?
  – Exploitation of natural resources (like timber and iron-ore)
  – Manufacturing
    • Food processing, textiles, tobacco products, building transportation equipment, timber products
Artistic depiction of Montreal in 1888: Notice the factory smoke stacks near the river and *not* on the mountain – why?...

1st Phase of industrialization

James Williamson Factory, Montreal- 1887

1st Phase of industrialization

Montreal from Street Railway Power House chimney - 1896

1st Phase of industrialization

Photograph from a factory tower on the Lachine Canal and St. Laurence River -1896

1st Phase of industrialization

The growth of different product sectors between 1861-1891

1\textsuperscript{st} Phase of industrialization

- How?
  - Raw materials were \textit{transported} (train AND/OR boat) to urban areas
  - Raw materials were used to produce manufactured goods in \textit{factories}
  - Factories used machines that ran using \textit{steam engines}
  - Steam engines were run using \textit{coal power} as the main source of energy
  - Goods were manufactured quickly and in large quantities \(\Rightarrow\) \textit{mass production}
  - Manufactured goods were shipped and sold to different \textit{markets across Canada} and other countries for a \textit{profit} (by train and/or by boat)
1st Phase of industrialization

• How?
  – DIVISION OF LABOUR → each person who worked in a factory had a small task to complete
  – They ‘specialized’ in their task → which means they did it well AND quickly
  – The workers were ‘specialized’ because they did the same task over and over all day → they WERE NOT necessarily trained
  – Once all the short tasks were done → the good is complete and ready to be shipped and sold
  – This is a sharp contrast to craftspeople/artisans who worked on a good from start to finish
1st Phase of industrialization

Textile Factory late 1880s (artistic depiction)

1st Phase of industrialization

• How?
  – Industrial Capitalism
  – Industrial Capitalism = 1 group of wealthy people have the money to pay for a factory and the “means of production” (materials, workers, etc.) → these people hire (and fire) the workers → the goal is to increase wealth (profit)
  – Capital/investment in the 1st phase came from British investors/businessmen
  – Capital/Investment = money used to pay for the factories and what need needed to run
1st Phase of industrialization

The Bank of Montreal - 1858

- Businessmen were able to access capital through credit/loans from banks just like the Bank of Montreal
- Loans were repaid with interest
- Businessmen hoped that they still made a hefty profit even after paying interest on loans

1st Phase of industrialization

• Who?
  – Owners, managers and supervisors were mainly English speaking men of British origin (these people had the money)
  – The workforce was:
    • Unskilled
    • Usually Francophone or immigrants
    • Men, women and children (as young as 6-7 years old)
    • Workers were not treated well → poor/dangerous working conditions, low wages, long hours
The Eastern Continental Transportation Network

• What was it?
  – A network of railway lines and maritime (boat) shipping routes that were connected

• Why was this transportation network needed?
  – To ship raw materials (like iron-ore and lumber) to factories AND to ship finished goods from factories to markets in Canada and around the world

• This must have been expensive, who paid for it?
  – The British government and eventually the government of Canada → they understood how important industry was → so they invested in building railway lines and canals
The Eastern Continental Transportation Network

• Canals
  – Canals were important infrastructure used for shipping goods and raw materials from place to place
  – Canals allowed boats to travel around and bypass waterfalls, shallow waterways and/or narrow waterways → larger ships can now navigate
  – They became important in Canada in the early 1800s → but were improved and expanded upon in the late 1800s
  – This expansion allowed more trade between large Canadian cities like Montreal and Toronto and American cities and cities around the world
The Eastern Continental Transportation Network

Network of Canals in Canada at the end of the 1800s

The Eastern Continental Transportation Network

• Important canals in Canada during the 1\textsuperscript{st} phase of industrialization:
  – The \textbf{Lachine Canal} in Montreal
  – The \textbf{Welland Canal} in Ontario

• During the First Phase of Industrialization → \textbf{Ports} in cities like Montreal also growing in size to allow more boats to dock and to allow larger ships to dock
The Eastern Continental Transportation Network

The Lachine Canal (in red) → boats could avoid the rapids surrounding Montreal to the South.
The Eastern Continental Transportation Network

The Lachine Canal in the late 1800s

The Eastern Continental Transportation Network

• **Widening of Canals** during the 1st phase of industrialization in Montreal
  
  – As industrialization took hold → more ships coming to Montreal from Ontario/ Great Lakes
  
  – **More ships** passing through Montreal to get to the Great Lakes region
  
  – **Larger ships** with more cargo
  
  – Canals built in the early/mid 1800s needed work
    • They needed to be wider
  
  – The Lachine Canal was widened from 1873-1884
The Eastern Continental Transportation Network

Artistic depiction of the Lachine Canal widening- Early 1880s
Late 19\textsuperscript{th} century: The Importance of the Railway Network

- The development of a railway network in Canada was important to the government and to industry:
  - Transport raw material and finished goods quickly over long distances
  - Railways could be used year-round (unlike some waterways and horse drawn buggies)
  - Transportation of people to colonize (move to and live in) new areas of Quebec and Canada
  - A new industry developed $\rightarrow$ manufacturing railway equipment $\rightarrow$ this developed the economy even more
Late 19th century: The Importance of the Railway Network

• Before 1867:
  – Not a big railway network in Canada (beginning of the “Grand Trunk” Railroad)
  – Did not connect all the main regions of Canada together

• After 1867:
  – The use of the “Grand Trunk Railroad” continued
  – Construction of the Intercontinental Railway which eventually connected the Maritimes (Atlantic Ocean) to the Pacific (British Columbia) → finished in 1885
  – Railway connections throughout Canada helping transport people, raw materials and goods → this helped the Canadian economy → goods became cheaper due to the speed of transportation
Late 19\textsuperscript{th} century: The Importance of the Railway Network

Network of Railways in Canada around 1880

Late 19th century: The Importance of the Railway Network

The Ste- Anne-de-Bellevue Bridge and Canal in the early 1900s

Late 19\textsuperscript{th} century: The Importance of the Railway Network

Oldest photograph of a locomotive in Canada- “No. 6 Coos” in 1856

Late 19th century: The Importance of the Railway Network

One of the first locomotives in Canada-1853


Section of railway in the Bas St. Laurent region of Quebec - 1875

Late 19th century: The Importance of the Railway Network

Bridge over Reversing Falls in New Brunswick - 1885