

CHAPTER 29-THE MAKING OF INDUSTRIAL SOCIETY

The early 1700s saw the start of industrialization, a world-changing development. England was the first to industrialize. There, industrialization was made possible by several factors. First, there was a shift from the use of scarce wood to abundant coal for energy. There were also a large amount of raw materials that were being supplied by her colonies. Finally, the colonies provided the markets for the goods produced.

Increased technology produced better iron and steel, and tied with the steam engine produced the railroad and the steamship, new methods of transportation. These changes lowered the costs of goods and increased their flow into market. Other machines also led to the start of the factory system, bringing together machines, labor, and raw materials. Although the system increased production, the work was dangerous and low paying. These condition brought protest, most notably involving the Luddites in the early 1880s.

Production increased with the introduction of interchangeable parts and, in 1913, the assembly line. Industrialization was expensive, however, and needed a large investment of capital. This spurred on the development of corporations, protection for investors and later monopolies and cartels.

Industrialism was a British monopoly until the 1800s. When Napoleon ended internal trade barriers and did away with the guilds, both Belgium and France began to industrialize. In Germany, Bismarck's government sponsored heavy industry in both arms and shipping.

In North America, industry was slow to start due to lack of capital and few laborers. However, by the 1820s, a flood of British immigrants began work in the cotton textiles industry. By the 1860s, there was a rail network and in the 1870s heavy iron and steel production increased, driven by the demand for more railroads.

Industrialization brought demographic changes to society as well. Improved diets and sanitation meant lower death rates and a rise in population. Changes also included the movement of people from farms to cities. At first, workers suffered from numerous problems, but government involvement helped to improve conditions. Also during this time period people moved across continents, fleeing bad conditions or to try to improve their lives. Reforms came gradually with resistance from both industry and government, However, working conditions improved, trade unions formed to represent workers, and child labor was restricted.

Later in the industrial age, the status of men and women changed. There were new social classes based on wealth and occupation, as well as changes in the structure of families. Within families the status of men increased because they were the wage earners and women were expected to stay home to raise children. In England, children who in the early 1880s had been workers, benefited from mandatory primary education by the late 1880s.

A major challenge to industrialization came from the various socialists who believed in cooperative control of industry and education for all children. The early Utopians established communities based on these principles. The best known socialists were Karl Marx and Friedrich Engels, authors of *The Communist Manifesto*. Believing that capitalism exploited the workers and controlled the political process,

they predicted a revolution that would lead to a just and equal society. These ideas had a tremendous impact in their day, through the 1900s, and today. Although they experienced these changes later than the west, Russia and Japan eventually became industrialized as industrialization spread across the globe. Russia invested in thousands of miles of railroads and by 1900 produced half of the world's oil. As in Russia, the government of Japan promoted industrialization. The Japanese brought in foreign experts, created new industries, opened technical schools, and by 1900 Japan was the most industrialized nation in Asia.

Key Concept 5.1. Industrialization and Global Capitalism

- I. Industrialization fundamentally changed how goods were produced.
- II. New patterns of global trade and production developed that further integrated the global economy as industrialists sought raw materials and new markets for the increasing amount of goods produced in their factories.
- IV. There were major developments in transportation and communication, including railroads, steamships, telegraphs and canals.
- VI. The ways in which people organized themselves into societies also underwent significant transformations in industrialized states due to the fundamental restructuring of the global economy.

Key Concept 5.2. Imperialism and Nation-State Formation

- I. Industrializing powers established transoceanic empires.