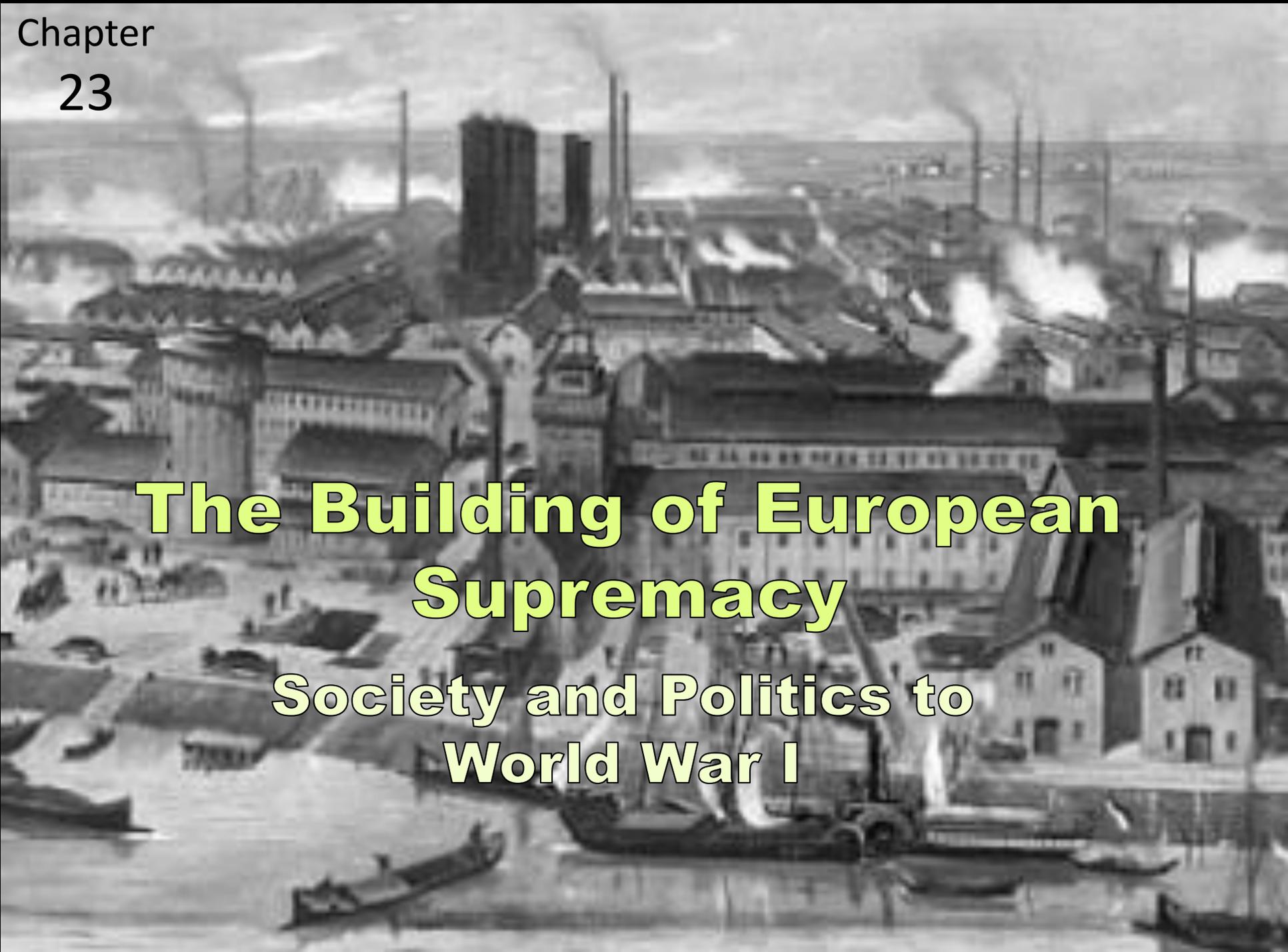


Chapter

23



**The Building of European
Supremacy**

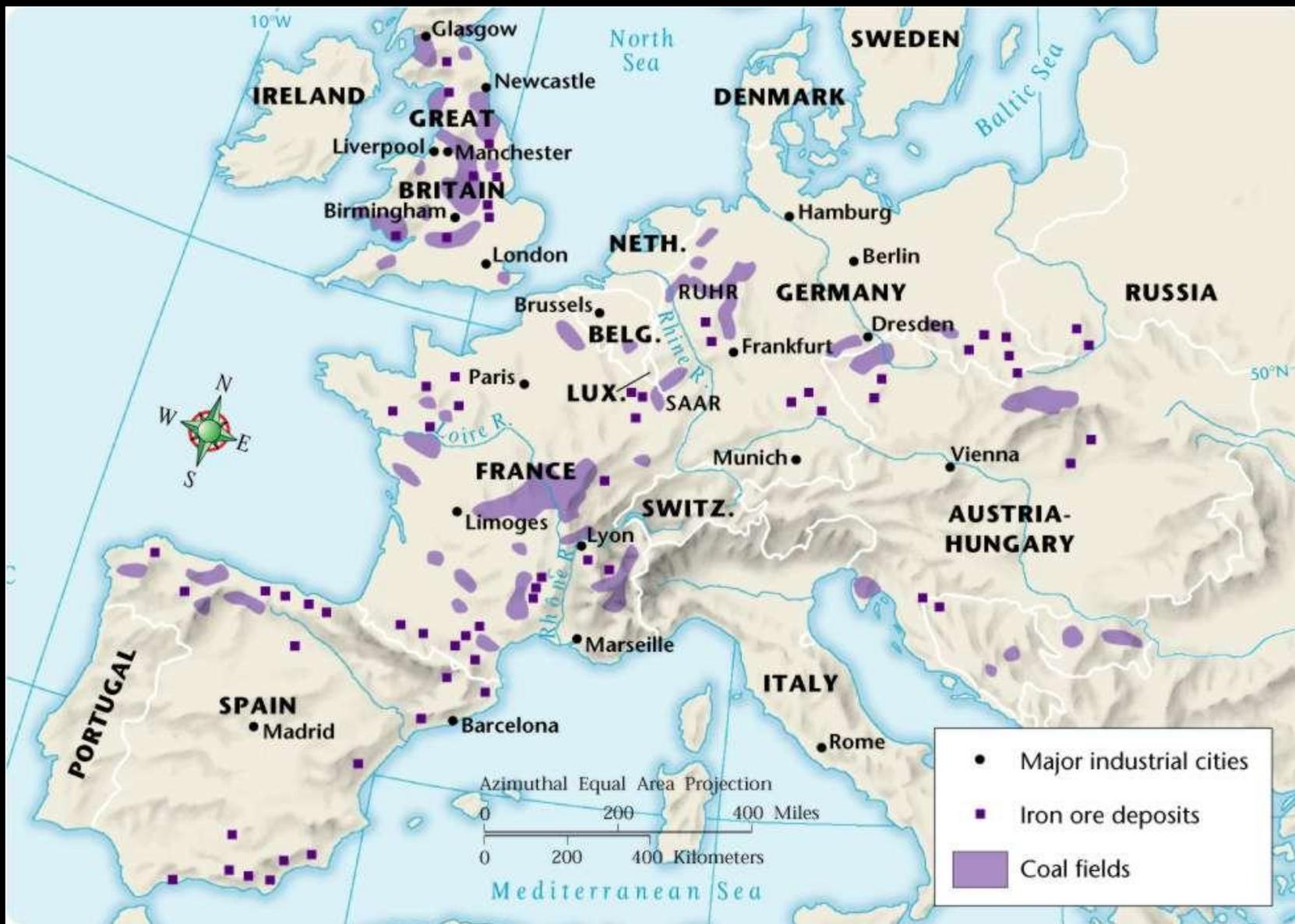
**Society and Politics to
World War I**

New Industrial Powers

During the early Industrial Revolution, Britain stood alone as the world's industrial giant. By the mid-1800s, other nations had joined the race, and several newcomers were challenging Britain's industrial supremacy.

- **Belgium** became the first European nation outside Britain to industrialize.
- **Germany** united into a powerful nation in 1871. Within a few decades, it became Europe's leading industrial power.
- **The United States** made rapid technological advances, especially after the Civil War. By 1900, American industry led the world in production.
- **Japan** industrialized rapidly after 1868.
- **Canada, New Zealand, and Australia** built thriving industries.
- Eastern and southern Europe industrialized more slowly. These nations lacked natural resources or the capital to invest.

Centers of Industry



Technology and Industry

The marriage of science, technology, and industry spurred economic growth. To improve efficiency, manufacturers designed products with **interchangeable parts**. They also introduced the **assembly line**.

STEEL

Henry Bessemer developed a process to produce stronger steel.

Steel quickly became the major material used in tools, bridges, and railroads.

CHEMICALS

Chemists created hundreds of new products.

New chemical fertilizers led to increased food production.

Alfred Nobel invented dynamite.

ELECTRICITY

Alessandro Volta developed the first battery.

Michael Faraday created the first electric motor and the first **dynamo**, a machine that generates electricity.

Thomas Edison made the first electric light bulb.

Advances in Transportation and Communication

During the second Industrial Revolution, transportation and communication were transformed by technology.

TRANSPORTATION

- Steamships replaced sailing ships.
- Rail lines connected inland cities and seaports, mining regions and industrial centers.
- Nikolaus Otto invented a gasoline-powered internal combustion engine.
- Karl Benz patented the first automobile.
- Henry Ford began mass producing cars.
- Orville and Wilbur Wright designed and flew the first airplane.

COMMUNICATION

- Samuel Morse developed the telegraph.
- Alexander Graham Bell patented the telephone.
- Guglielmo Marconi invented the radio.



The Rise of Big Business

New technologies required the investment of large amounts of money. To obtain capital, entrepreneurs sold **stock**, or shares in their companies, to investors.

Large-scale companies formed **corporations**, businesses that are owned by many investors who buy shares of stock.

Powerful business leaders created monopolies and trusts, huge corporate structures that controlled entire industries or areas of the economy.

Sometimes a group of businesses joined forces and formed a **cartel**, an association to fix prices, set production quotas, or control markets.

Population Explosion

Between 1800 and 1900, the population of Europe more than doubled. This rapid growth was not due to larger families. Instead, population soared because the death rate fell.

The drop in the death rate can be attributed to the following:

- People ate better.
- Medical knowledge increased.
- Public sanitation improved.
- Hygiene improved.

Average Life Expectancy in Selected Industrial Areas, 1850 - 1910

Year	Male	Female
1850	40.3 years	42.8 years
1870	42.3 years	44.7 years
1890	45.8 years	48.5 years
1910	52.7 years	56.0 years

Between 1850 and 1910, how much did life expectancy increase for men?

12.4 years

For women?

13.2 years

City Life

As industrialization progressed, cities came to dominate the West. At the same time, city life underwent dramatic changes.

- Settlement patterns shifted: the rich lived in pleasant neighborhoods on the outskirts of the city, while the poor crowded into slums near the city center.
- Paved streets, gas lamps, organized police forces, and expanded fire protection made cities safer and more livable.
- Architects began building soaring skyscrapers made of steel.
- Sewage systems improved public health.

Working-Class Struggles

The working classes grew in numbers and in importance. Workers protested to improve the harsh conditions of industrial life.

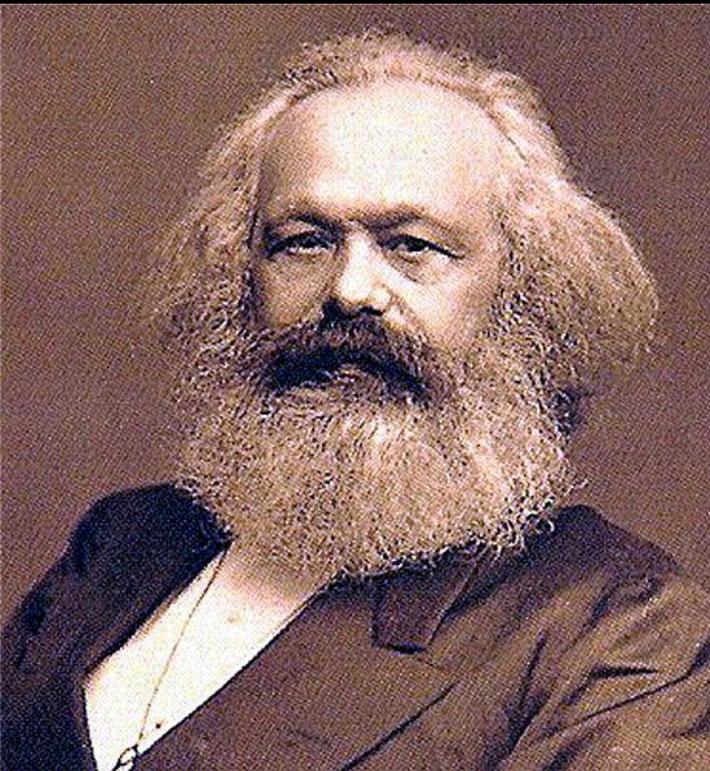
At first, business owners tried to silence protesters, strikes and unions were illegal, and demonstrations were crushed.

By mid-century, workers slowly began to make progress:

- Workers formed **mutual-aid societies**, self-help groups to aid sick or injured workers.
- Workers won the right to organize unions.
- Governments passed laws to regulate working conditions.
- Governments established old-age pensions and disability insurance.
- The **standard of living** improved.

Unions and Political Parties

- Unions and political parties presented new opportunities for Europe's socialists.
 - They generally sought change within the existing political framework rather than through violent revolution.



- In the **First International**, founded in 1864, Karl Marx himself made considerable accommodation to the revolutionary movement.
- Marxism emerged as Europe's single most important strand of socialism.
- At the **Geneva Congress** in 1866 a decision was made to adopt the 8-hour work day as a fundamental demand.

Labor and Socialist Organizations

- In Britain, the growing trade union movement organized the **Labor Party** (1901),

- It was a rather militant movement not much interested in socialism
- In Britain it remained the preserve for intellectuals.



The Independent Labor Party, founded in 1893

Labor and Socialist Organizations

- In 1884, a number of them had formed the **Fabian Society**
 - advocated a peaceful, gradual, and democratic move to socialism
 - Wanted to reform Britain's imperialist foreign policy
 - Favored a national minimum wage, slum clearances, health service, and national education
- France's socialists were popular, but generally divided between advocates of cooperation with the middle class and those who held out for party purity.

Labor and Socialist Organizations

- The labor movement avoided political participation, preferring the **doctrine of syndicalism**, which advocated the general strike as a means of generating worker unity and power.
- Germany's **Marxist Democratic Party (SPD)** was Europe's strongest.
- In theory, the party rejected peaceful democratic reform, favoring a Marxist revolution.
- In practice, however, the party was a responsible participant in German electoral politics.

The Industrial Revolution: Cause and Effect

Causes

- Increased agricultural productivity
- Growing population
- New sources of energy, such as steam and coal
- Growing demand for textiles and other mass-produced goods
- Improved technology
- Available natural resources, labor, and money
- Strong, stable governments that promoted economic growth

Immediate Effects

- Rise of factories
- Changes in transportation & communication
- Urbanization
- New methods of production
- Rise of urban working class
- Growth of reform movements

Long-Term Effects

- Growth of labor unions
- Inexpensive new products
- Spread of industrialization
- Rise of big business
- Expansion of public education
- Expansion of middle class
- Competition for world trade among industrialized nations
- Progress in medical care

Russian Industrialization and the Birth of Bolshevism



Vladimir Ilyich Lenin
Владимир Ильич Ленин

- In the 1890s, the czars industrialized Russia.
- Popular discontent and socialist parties followed behind.
- The more radical Social Democratic Party had to function in exile due to czarist repression.
- After 1900, Lenin became one of its leaders.

Russian Industrialization and the Birth of Bolshevism

- Lenin contributed two important ideas to European socialist doctrine:
 - the leadership of a small elite party of professional revolutionaries
 - and an alliance of workers and peasants.
- The Revolution of 1905 forced the czar to establish a parliament (**Duma**), but he was soon able to blunt its effect.
- A promising agricultural reform program was mired by 1911.
- The regime began to consider war as a means of winning support.