

*Welcome!*

**Today's Agenda**

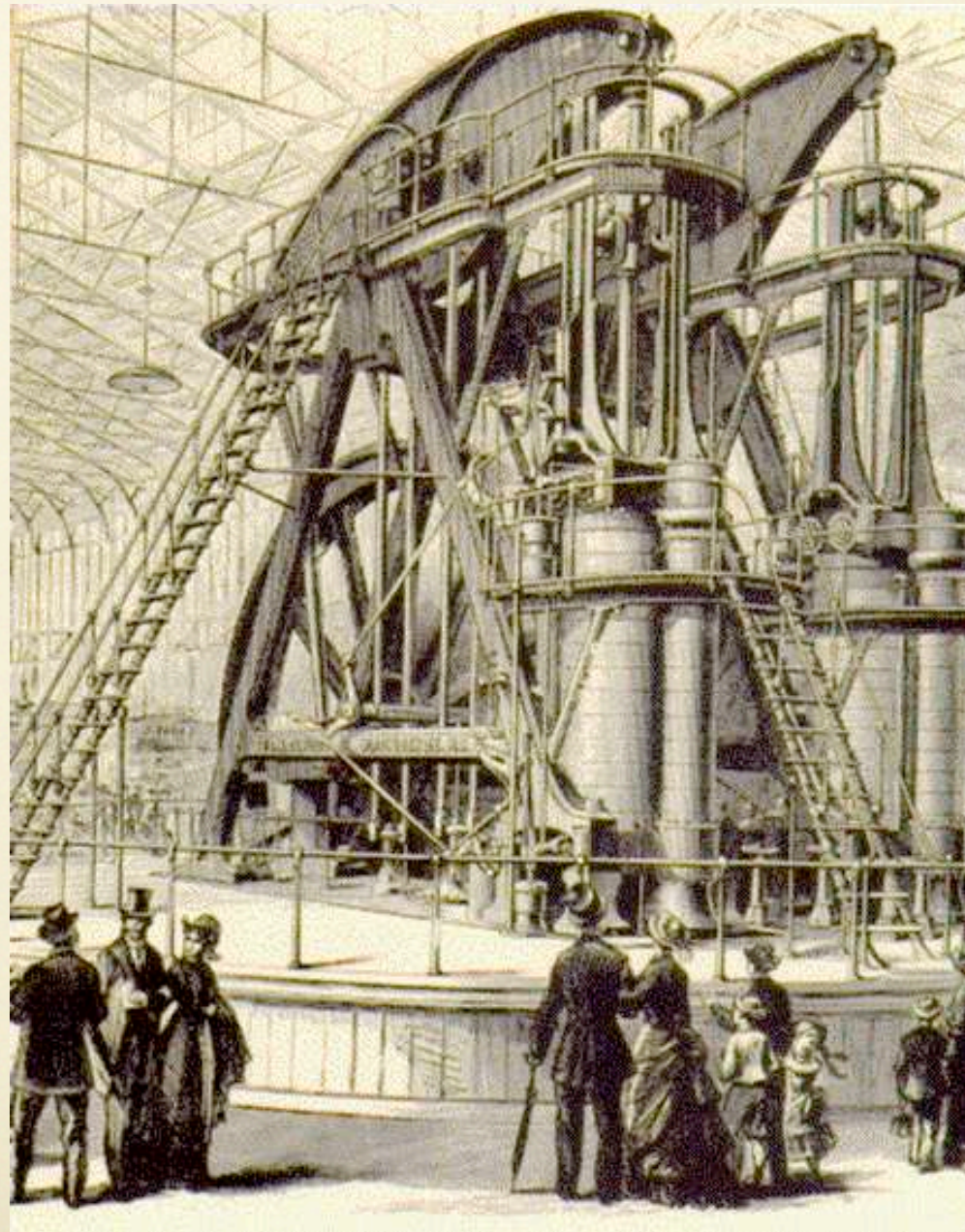
~Lecture 12: The  
Dynamo



# UNIT 3 ➤ EXPANDING FREEDOM'S BOUNDARIES ◀

## *Lecture 12: The Dynamo*

Centennial  
Exposition  
1876



Corliss Steam Engine



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## *Lecture 12: The Dynamo*

Factors that stimulated industrialization:

- ~ innovations in communication and transportation
  - ~ telegraph, transatlantic cable, telephone
  - ~ railroad system

space and time reorganized



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## *Lecture 12: The Dynamo*

Factors that stimulated industrialization (con't):

- ~ innovations in industrial materials and sources of power
  - ~ steel
  - ~ coal
  - ~ oil
  - ~ electricity
  - ~ steam turbine + electricity

Bessemer process



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## *Lecture 12: The Dynamo*

Factors that stimulated industrialization (con't):

- ~ innovations in business forms and practices
  - ~ big business
    - ~ corporations
    - ~ vertical integration
    - ~ trusts
  - ~ mass production
    - ~ dedicated machines
    - ~ scientific management
    - ~ continuous production
  - ~ marketing
    - ~ advertising
    - ~ department stores

national products for national markets by national businesses



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## *Lecture 12: The Dynamo*

Impact of industrialization:

~standard of living increased but distribution of wealth narrowed

~middle class: from small owners to managers

~working class: from autonomous labor to directed labor



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## *Lecture 12: The Dynamo*

### Rise of metropolitan culture

Factors stimulating city growth:

- ~transportation
- ~skyscrapers
- ~electricity
- ~telephones



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## *Lecture 12: The Dynamo*

Characteristics of metropolitan culture:

- ~ geographic distribution of wealth
- ~ mobile
- ~ anonymous
- ~ consumer oriented