

THE EXPANSION OF INDUSTRY

A NEW INDUSTRIAL AGE

**HOW DID THE DEVELOPMENTS IN
OIL, STEEL, & ELECTRICITY CHANGE
INDUSTRY IN THE CITIES?**

Guiding Question

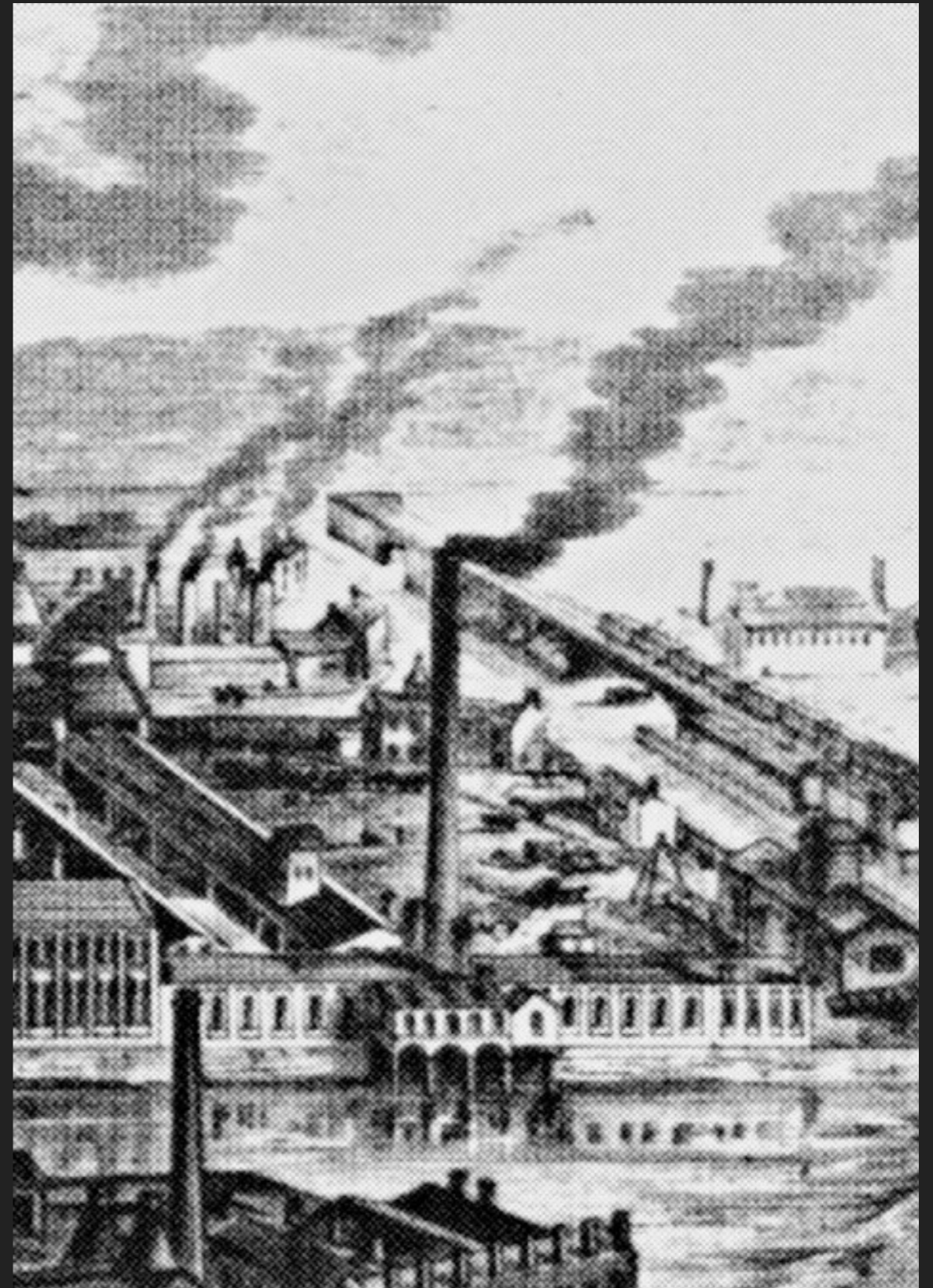
THE GROWTH OF INDUSTRY

- ▶ By 1920s, the U.S. is the world's leading industrial power due to:

1: wealth of natural resources

2: government support for business

3: growing urban population



OIL

- ▶ Seen as “black gold;” high valuable
- ▶ 1859, **Edwin L. Drake** successfully uses steam engine to drill for oil
- ▶ Petroleum-refining industry first makes kerosene, then gasoline



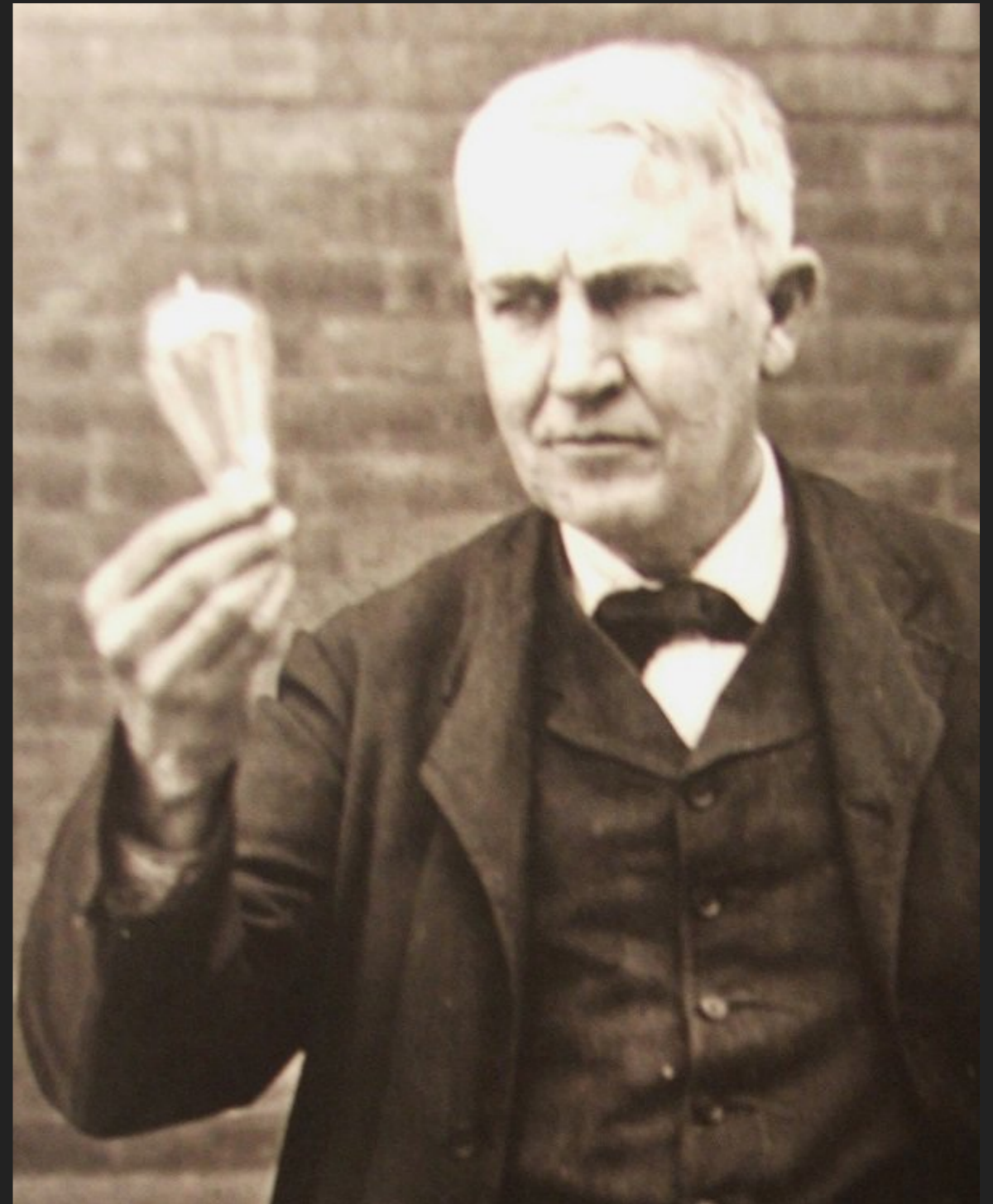
STEEL

- ▶ Abundant deposits of coal, iron spur industry
- ▶ **Bessemer process** puts air into iron to remove carbon to make steel
- ▶ Made steel from scrap or raw materials



ELECTRICITY

- ▶ 1876, **Thomas Alva Edison** invents lightbulb & creates system for electrical production, distribution
- ▶ Electricity changes business; by 1890, runs numerous machines
- ▶ Allows manufacturers to locate plants anyplace; industry grows



NEW USES FOR STEEL & ELECTRICITY

- ▶ **Steel:** used in railroads, barbed wire, farm machines, bridges (Brooklyn Bridge), & skyscrapers
- ▶ **Electricity:** runs machinery available in homes, plants/factories can be located anywhere & run numerous machines




THE INDUSTRIAL EAST

THE RAILROAD

HOW DID THE DEVELOPMENT OF THE RAILROAD CHANGE THE UNITED STATES?

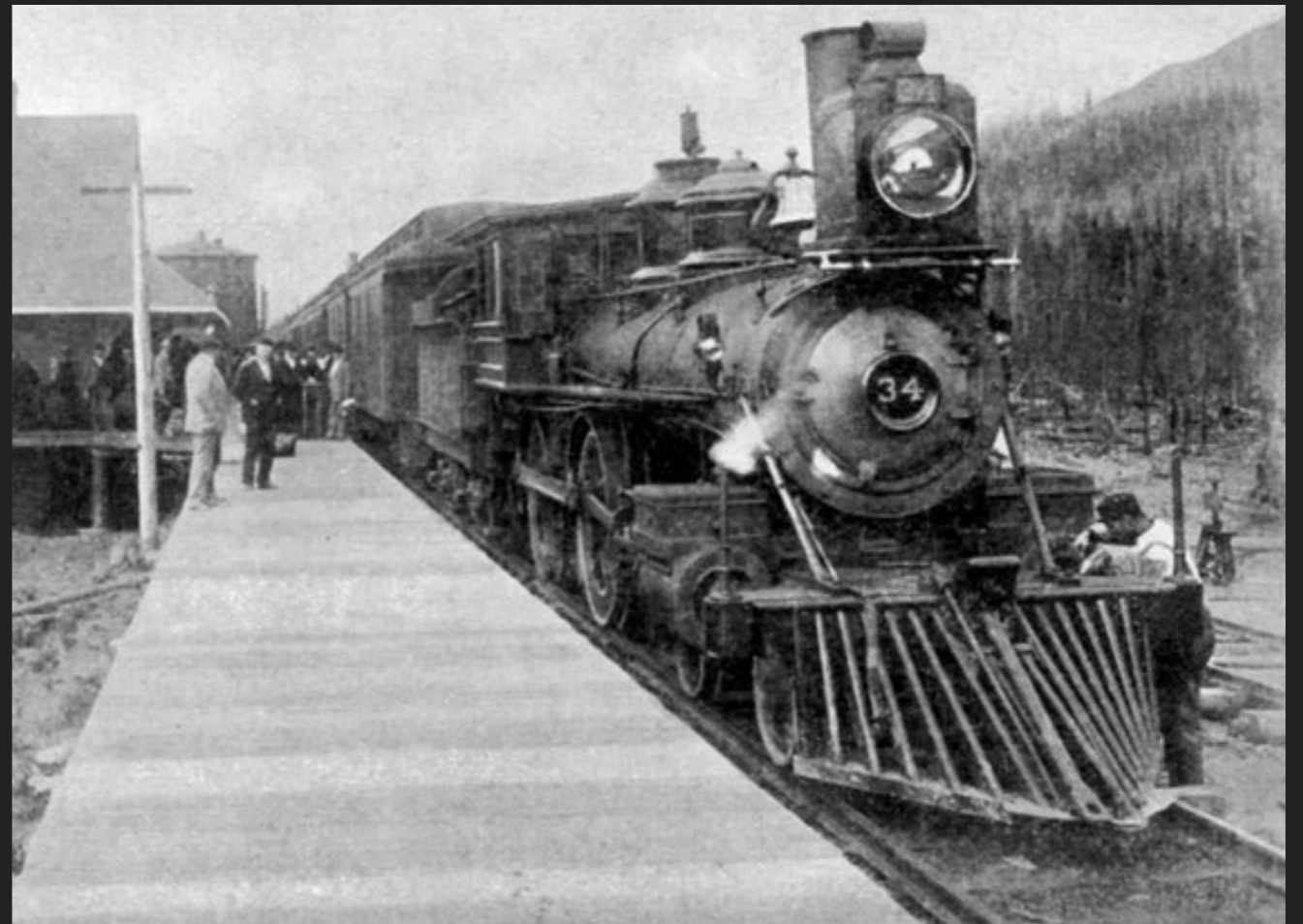
Guiding Question

- 
- ▶ RR sells government land to businesses, not settlers
 - ▶ Fixed prices keep farmers in debt
 - ▶ Charge different customers different rates

FARMERS LAND TAKEN OVER

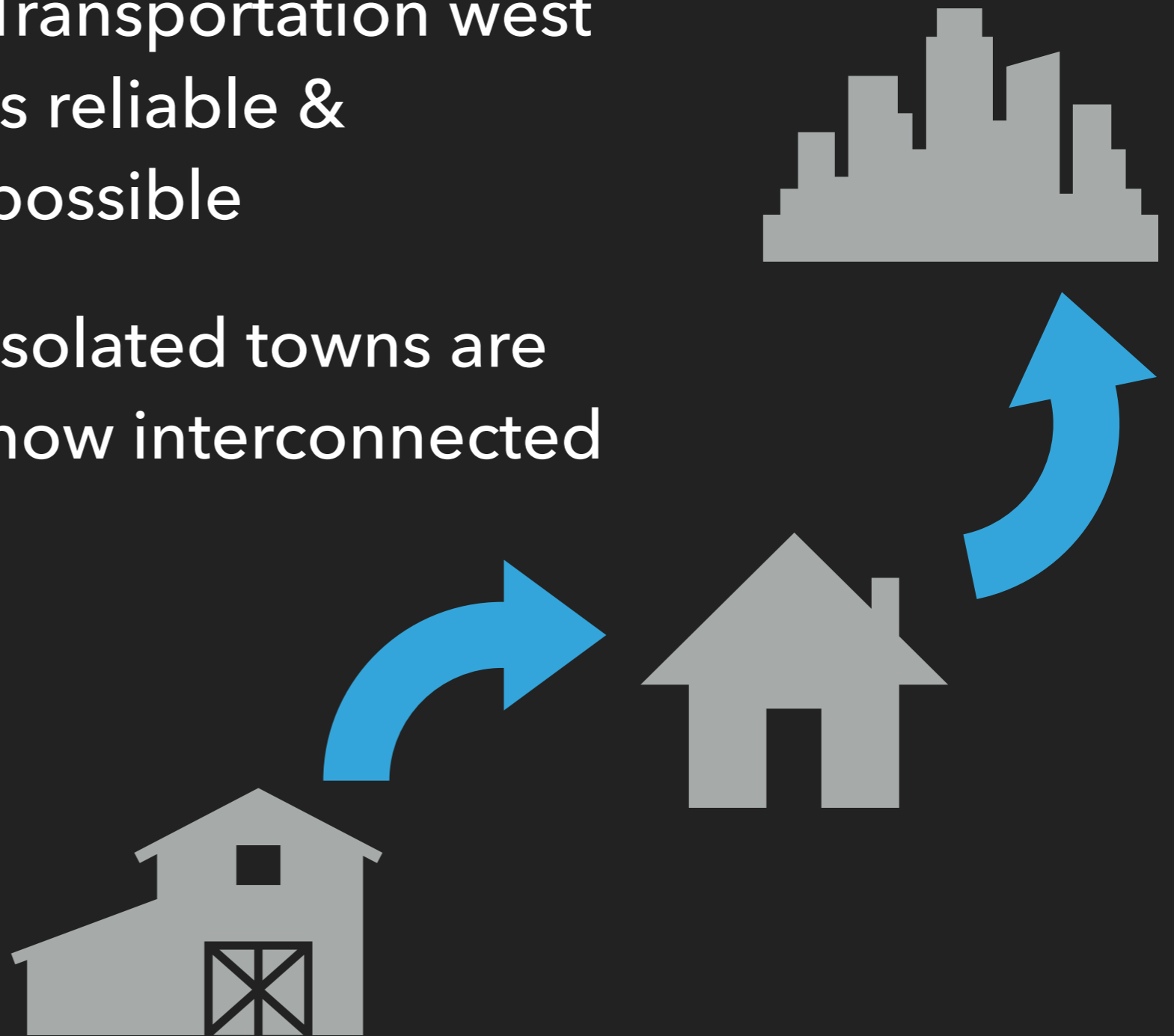
NEW NATIONAL MARKETS

- ▶ Iron
- ▶ Coal
- ▶ Steel
- ▶ Lumber
- ▶ Glass



UNIFIED TRAVEL

- ▶ Transportation west is reliable & possible
- ▶ Isolated towns are now interconnected



STANDARDIZED TIME

- ▶ 24 time zones around the world
- ▶ Created by C.F. Dowd



GOVERNMENT REGULATION

- ▶ Land grants & loans given to railroad from the government (gov-nt encourages RR growth)
- ▶ Munn v. Illinois = states' rights to regulate RR
- ▶ Interstate Commerce Act = federal government supervises RR activity

NEW CITIES



- ▶ Pullman, Illinois
- ▶ Provides housing, doctors, shops, sports field, etc.
- ▶ Controls residents to control workforce

RAILROAD CONSOLIDATION

- ▶ 7 companies control two thirds of all RR in the United States
- ▶ Decreases competition
- ▶ Monopoly



- ▶ **Crédit Mobilier =
overpay for laying
track; pocket profits**

GREED & CORRUPTION