

LECTURE 8

THE TRANSPORTATION REVOLUTION

c. 1815-1860

- A. Ralph Waldo Emerson on "The Superstitions of Our Age" (1847)
- B. The politics of "internal improvements"
  - Albert Gallatin's Report (1808) calls for federally-supported national system of roads and canals
  - The Madisonian Program/Henry Clay's American System (1816+)
  - John C. Calhoun and the Bonus Bill (1817)
  - The General Survey Act (1824-40)
    - By the time the Army Corps of Engineers wrapped up its work in 1840, nearly 50 new railroads had been surveyed.
  - Major George W. Whistler on the B&O (c. 1827-29)
- C. Elements of the Transportation Revolution [see Cowan]
  - 1. Roads
    - The Lancaster Pike (1792)
    - The National/Cumberland Road (1807+)
  - 2. Steamboats
    - Fulton's Clermont (1807)
    - Steamboats on Western Rivers: Fulton, Shreve, et al. (1811+)
    - Steamboats and machine making: Evans' Mars Works in Phila.(1806); George Evans' Pittsburgh Steam Engine Co. in Pittsburgh (1812) (schools for mechanics/engineers)
  - 3. Canals
    - The Powtowmack Company (1790s) and corporate capital
    - The Erie Canal (1825) and state financing
  - 4. Railroads:
    - Early "connector" railroads: The Boston & Lowell (1830); the Charleston & Hamburg (1830)
    - The "anthracite roads": the Delaware & Hudson (1828); The Reading (1830s)
    - Trunk line railroads: the Baltimore & Ohio (1828)

D. The Hardware:

- British transfers: "Planet class" locomotives (e.g. The Lowell Machine Shop)
- American adaptations: The "John Bull"
- Harrison's "Hercules" (1837) and the classic "American style" 4:4:0 locomotive
- Harrison in Russia (1842-1852): The Moscow & St. Petersburg Railroad
  - significance: American technology exported to Europe

E. Railroads and the rise of modern management

- The Chandler thesis
- The role of army engineers in the rise of modern management
  - accidents/managerial responses (e.g. Whistler on Western RR, c. 1840)
  - bookkeeping and modern accounting practices
  - the West Point ethos

F. Railroads and the imagination [see reader, pp. 191ff]

- Emily Dickinson's "The Railway Train";
- Daniel Webster's speech at Lebanon, N.H. (1847)