- A. Industrialization as a process vs. the concept of the "industrial revolution" [cf. Cowan, p. 67: "we no longer refer to it as a revolution..."]
- B. Chronology:
- 1783 Treaty of Paris; Britain recognizes American independence
- 1784 Opening of the China trade
- 1786 post-war depression reaches low point
  - dissatisfaction with the Articles of Confederation
  - Shay's rebellion (Aug.-Dec, 1786)
  - \*\*\*OLIVER EVANS AUTOMATED MILL IN OPERATION, Sept. 1786)\*\*\*
- 1787 Constitutional convention meets in Philadelphia, May-Sept.

  --Delaware = 1st state to ratify, followed by
  Pennsylvania and New Jersey (all in
  Dec. 1787)
- 1788 Nine states ratify and new constitution goes into effect
- 1789 Presidential election (January); George Washington inaugurated (April 30)
- 1790 Patent Law enacted
  - Secty. of Treasury Alexander Hamilton advances his fiscal

program:

- (1) fund national debt at par value;
- (2) assume \$25m in state debts; at first defeated, but then adopted after a compromise measure places national capital in District of Columbia (July)
- (3) 1st Bank of the United States (Feb. 1791);
- (4) Report on Manufactures drafted but not adopted (1790-91)
- \*\*\*Samuel Slater builds mill for Almy & Brown\*\*\*

## 1791-93+ - Jefferson and Hamilton feud

Jefferson resigns as Secretary of State (Dec. 1793)

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## CHRONOLOGY (cont.)

- 1794 Whiskey Rebellion in western Pennsylvania
  \*\*\*ELI WHITNEY PATENTS COTTON GIN\*\*\*
- 1796 George Washington's farewell/ John Adams elected
- 1798 Undeclared war with France

  \*\*\*WHITNEY SIGNS GOVERNMENT CONTRACT FOR

  10,000 MUSKETS, to be delivered by 1801\*\*\*

  Simeon North also signs contract for pistols

  Both receive large government advances on their contracts
- 1800 Jefferson elected president of U.S.

  \*\*\*\*OLIVER EVANS BUILDS SMALL HIGH-PRESSURE

  STEAM ENGINE [receives patent in 1804]\*\*\*
- 1807 Embargo Act; escalating conflict with Indians in South and Midwest; rise of Tecumseh
- 1808 James Madison elected president
- 1810 Francis Cabot Lowell visits England; conducts industrial espionage re. cotton textile manufactures
- 1812-1815 War of 1812
- 1814-1815 Lowell and associates form Boston Manufacturing Company and build mill at Waltham, MA.

## C. FOOTNOTES ON THE 1780s and 1790s:

- 1. Hamilton's Report on Manufactures
  - --one result: establishment of national armories at Harpers Ferry (VA) and Springfield (MA), 1794
- 2. "Artists of Their Country"
  - a. Oliver Evans (1755-1819):
    - --automated mill (1786)
    - --high-pressure steam engine (1804)
  - b. Samuel Slater (1768-1835):
    - --emigrates to U.S. (1789)
    - --mill at Pawtucket, R.I. (1790) equipped with British spinning machinery
  - c. Eli Whitney (1765-1824):
    - --patents cotton gin (1794)
    - --government contract for 10,000 muskets (c. \$130K)
      - -- the legend of interchangeable parts
      - --extensions to 1809.
      - --the "American System" not uniquely American: precedents exist in France and Sweden
- 3. The significance of the Waltham-Lowell system (1814-1822+)
  - --integrated manufacturing at Waltham, 1814
  - --move to Chelmsford, MA (1822): continued expansion
  - --Spanish claims and the building of Lowell, 1821-24: the role of Daniel Webster
  - --female work force becomes famous as the "Lowell girls"
  - --Paternalism, religion, and social control: "the village steeple is the unfailing companion of the water wheel" (P. T. Jackson)
- 4. Thomas Jefferson's (ambivalent) position on manufacturing:
  - --Notes on the State of Virginia (1785):
    - --"those who labor in the earth are the chosen people of God"
    - --"let us never wish to see our citizens occupied at a work bench..."
    - --"let our workshops remain in Europe..."

- --Jefferson in Paris
  - --sees the work of Honore Blanc
  - --sends back a box of Blanc's Model 1777 muskets to U.S.
  - --Blanc's gauges
- --Jefferson and Eli Whitney
  --Jefferson as state-rights apostle of agrarianism