

Chapter 11 Technology, Culture, and Everyday Life

(1840-1860)

Technology and Economic Growth

- Westward movement started to increase with John Deere's steel tip plow that halved the labor to clear acres to till, making the hard soil better for farming.
- Wheat became as vital to the west as cotton to the south.
- Cyrus McCormick's mechanical reaper harvested grain seven times faster and with half the labor required, further making wheat great for the west. This invention would also give an edge to the north in the war to come.
- Eli Whitney formulated a plan to manufacture muskets using interchangeable parts and unskilled labor, becoming a widely used method, and by 1851, Europeans had started to refer to manufacture by interchangeable parts as the "American System."
- Samuel F.B. Morse transmitted the first telegraph from Baltimore to Washington in 1844; causing American's to quickly seize the opportunity to cut down time restraints.
- Trains became huge during this time, but there were many problems to them, like a lack of time zones for scheduling, and no electronic lights, so the trains could not run at night. Eventually, kerosene lamps allowed trains to travel at night, and miles of telegraphing cable were extended so the location of the trains could be known. By 1860 the value of goods transported on trains surpassed that of the canals, making railroads the nation's first form of "big business."
- The use of steam power boosted the average worker's income 25%.

- Year round city work provided a full 12 months of pay, unlike season oriented farm work.
- Still, most families could not survive on the annual wages of the male breadwinner, and need the income of the women and children to work.

The Quality of Life

- Stoves improved the heating of homes, and the ability to cook multiple dishes at once lead to a more diverse diet.
- Urban waterworks projects started, bringing water into the middle of big cities like New York.
- Sanitation was still bad, and street cleaning was often left to hogs.
- Catharine Beecher's *Treatise on Domestic Economy* told women to make their house a "glorious temple."

Disease and Health

- Epidemics were still spread wildly, and inability to understand disease lead to a distrust of physicians.
- Anesthetic is invented in the 1840's and William T.G. Morton uses it for surgical purposes, making it widely used in American Surgery.
- Sylvester Graham counseled total abstinence from alcohol, and substituting meat for grains and vegetables.
- Phrenology emerges as a popular form as science.

Democratic Pastimes

- Technological improvements made the newspaper more accessible, and more entertaining.

- The theatre (which Shakespeare was vastly popular in), minstrel shows (which compounded, black stereotypes), and P.T. Barnum's circus became largely popular forms of entertainment.

The Quest for Nationality in Literature and Art

- James Fenimore Cooper – Created the American fiction character, frontiersman Natty Bumppo in *The Pioneers*(1823)
- Ralph Waldo Emerson – Leader of the transcendentalist movement (the American offshoot of romanticism). His most famous work was “The American Scholar” (1837) where he called for a unique American style.
- Henry David Thoreau – Represented younger Emersonians, being much of a “doer”, going to jail rather than paying a poll tax. A famous work of his was “Civil Disobedience” (1849) in which he defended a citizen's right to disobey unjust laws. He also spent two years away from society at Walden Pond where he wrote his most famous book *Walden* in which he said that material wants could be satisfied with a few weeks of work a year, and thereby leave more time for reexamining life's purpose.
- Margaret Fuller – Wrote *Woman in the Nineteenth Century* (1845), breaking with the prevailing notion of separate spheres for men and women.
- Walt Whitman – Major work: *Leaves of Grass* (1855) a compilation of poems, including “Song of Walt Whitman”.
- Nathaniel Hawthorne – *The Scarlet Letter* (1850)
- Edgar Allen Poe – “The Cask of Amontillado” (1846)
- Herman Melville – *Moby Dick* (1851)

- These last three writers probed the depths of the human mind rather than the intricacies of social relationships, evolving into an underlying pessimism about human character.
- Paperback books were sold in bulk for the first time for entertainment in the 1840's for as little as seven cents.
- The Hudson River School (1820's-1870's) was best represented by Thomas Cole, Asher Durand, and Frederick Church, who painted scenes of the region around the Hudson River.