Chapter 14- Forging the National Economy

1790-1860

A. The Westward Movement

1. The rise of Andrew Jackson, the first president form beyond the Appalachian Mountains, exemplified the inexorable westward march of the American people; the West, with its raw frontier, was the most typically American part of America
2. The Republic and the people were so young —as late as 1850, half of Americans were under the age of thirty; By 1840 the "demographic center" of the American population map had crossed the Alleghenies; by the Civil War it had crossed the Ohio River
3. Legend portraying men carving civilization out of the western woods were false as in reality, life was downright grim for most pioneer families in the West
    1. Poorly fed, ill-clad, housed in hastily erected shanties, they were perpetual victims of disease, depression, and premature death; above all, unbearable loneliness haunted them, especially the women, who were often cut off from human contact
    2. Frontier life could be tough and crude for men as well as no-holds-barred wrestling was a popular entertainment and pioneering Americans, marooned by geography, were often ill informed, superstitious, provincial, and fiercely individualistic
    3. Popular literature of the period abounded with portraits of unique, isolated figures like Cooper's heroic Natty Bumppo and Melville's restless Captain Ahab
    4. Even in the era of "rugged individualist" there were important exceptions; pioneers, in tasks beyond their resources would call upon their neighbors for logrolling and barn raising and upon their government for help in building internal improvements

B. Shaping the Western Landscape

1. The westward movement also molded the physical environment
    1. Pioneers in a hurry often exhausted the land in the tobacco regions then pushed on

2. In the Kentucky bottomlands, tall cane posed a barrier but settlers soon discovered that when the cane was burned off, European bluegrass thrived in the canefields

3. Kentucky bluegrass" made ideal pasture for livestock—and lured thousands

2. The American West felt the pressure of civilization in additional ways

1. By the 1820s American fur trappers were in the Rocky Mountain regions and the fur-trapping empire was based on the "rendezvous" system; each summer, traders ventured from St. Louis to the Rocky Mountain valley and waited for the trappers and Indians to arrive with beaver pelts to swap for manufactured goods from the East

2. The trade thrived for two decades before the hats went out of style and fewer beavers

3. Trade in buffalo robbers also flourished, leading eventually to the virtually total annihilation of the massive bison herds and still farther west, on the California coast, other traders bought up sea-otter pelts, driving otters to the point of near-extinction

4. Aggressive, heedless exploitation of West natural bounty—"ecological imperialism"

3. Yet Americans in this period also revered nature and admired its beauty; the spirit of nationalism fed the growing appreciation of the uniqueness of the American wilderness

1. Searching for the United States' distinctive characteristics, many observers found the wild, unspoiled character of the land, especially the West, to be defining

2. Other countries may have mountains or rivers, but none had the pristine, natural beauty of America, unspoiled by human hands and reminiscent of a time before the dawn of civilization—attitude became a kind of national mystique, inspiring literature and painting, and eventually kindling a powerful conservation movement

3. George Catlin was among the first to advocate for preservation of nature as deliberate national policy; he proposed the creation of a national park (Yellowstone, 1872)

C. The March of the Millions

1. As the American people moved west, they also multiplied at an amazing rate; by mid-century the population was still doubling approximately every twenty-five years
2. By 1860, the original thirteen states had more than doubled in number: thirty-three stars graced the American flag and the United States was the fourth most populous nation in the western world, exceed only by three European countries—Russia, France, and Austria
3. Urban growth continued explosively; in 1790 only two American cities (Philadelphia and New York) had populations of twenty thousand or more but by 1860, there were 43
4. Such over rapid urbanization unfortunately brought undesirable by-products; It intensified the problems of smelly slums, feeble street lighting, inadequate policing, impure water, foul sewage, ravenous rats, and improper garbage disposal
5. A continuing high birthrate accounted for most of the increase in population, but by the 1840s the tides of immigration were adding hundreds of thousands more
    1. Before this decade immigrants had been flowing in at a rate of sixth thousand a year, but suddenly the influx tripled in the 1840s and then quadrupled in the 1850s
    2. During these two feverish decades, over a million and a half Irish, and nearly as many Germans, swarmed down the gangplanks—why did they come?
6. The immigrants came partly because Europe seemed to be running out of room; Europe grew and "surplus" people, who were displaced and footloose in their homelands before they felt the tug of the American magnet (nearly 60 million people abandoned Europe in the century after 1840, about 25 million went somewhere other than in the United States)
7. Yet American still beckoned most strongly to the struggling masses of Europe, and the majority of migrants headed for the "land of freedom and opportunity"
    1. There was freedom from aristocratic caste and state church; there was abundant opportunity to secure broad acres and better one's condition
    2. Letters sent by immigrants—"America letters"—often described in glowing terms the richer life: low taxes, no compulsory military serve, and "three meat meals a day"

3. The introduction of transoceanic steamships also meant that the immigrants could come speedily, in a matter of ten or twelve days instead of ten or twelve weeks

D. The Emerald Isle Moves West

1. Ireland was drained in the mid-1840s; a terrible rot attacked the potato crop, on which the people had become dangerously dependent, and about one-fourth of them were swept away by disease and hunger; all told, about two million perished
2. Tens of thousands of destitute souls, feeling the Land of Famine for the Land of Plenty, flocked to America in the "Black Forties"—Ireland's great export has been population
3. These uprooted newcomers—too poor to move west and buy the necessary land, livestock, and equipment—swarmed into the larger seaboard cities (Boston and NYC)
4. The luckless Irish immigrants received no red-carpet treatment
    1. Forced to live in squalor, they were rudely crammed into the already-vile slums and were scorned by the older American stock, especially "proper" Protestant Bostonians, who regarded the scruffy Catholic arrivals as a social menace
    2. As wage-depressing competitors for jobs (kitchen maids and railroads) the Irish were hated by native workers—"No Irish Need Apply" was a sign commonly posted
    3. The Irish, for similar reasons, fiercely resented the blacks, with whom they shared society's basement; race riots between black and Irish dockworkers flared up
5. The friendless "famine Irish" were forced to fend for themselves; the Ancient Order of Hibernians, a semisecret society founded in Ireland to fight rapacious landlords, served in America as a benevolent society, aiding the downtrodden; it also helped spawn the "Molly Maguires," a shadowy Irish miners' union in the PA coal districts in 1860s-70s
6. The Irish tended to remain in low-skill occupations but gradually improved their lot, usually by acquiring modest amounts of property (education of children usually cut short)

7. Politics quickly attracted these gregarious Gaelic newcomers and they soon began to gain control of powerful city machines—American politicians made hast to cultivate the Irish vote, especially in the politically potent state of New York and politicians usually found it politically profitable to fire verbal volleys at London (Irish hatred of the British)

E. The German Forty-Eighters

1. The influx of refugees from Germany between 1830 and 1860 was just as spectacular as that from Ireland; during these troubled years, over a million and a half Germans arrived
    1. The bulk of them were uprooted farmers, displaced by crop failures and other hardships; but a strong sprinkling were liberal political refugees
    2. Saddened by the collapse of the democratic revolutions of 1848, they had decided to leave the autocratic fatherland and flee to America—the brightest hope of democracy
2. Zealous German liberals like Carl Schurz, a relentless foe of slavery and public corruption, contributed richly to the elevation of American political life
3. Unlike the Irish, many Germanic newcomers possessed a modest amount of material goods; must of them pushed out to the lush lands of the Middle West, notably Wisconsin, where they settled and established model farms—like the Irish, they formed an influential body of voters, but they were less potent politically because they were more scattered
4. The hand of Germans in shaping American life was widely felt in still other ways
    1. The Conestoga wagon, the Kentucky rifle, and the Christmas tree were all German
    2. Germans had fled from the militarism and wars of Europe and consequently came to be a safeguard of isolationist sentiment in the upper Mississippi valley
    3. Better educated on the whole than the stump-grubbing Americans, they warmly supported public schools, including their *Kindergarten* (children's garden)
    4. The Germans likewise did much to stimulate art and music; as outspoken champions of freedom, they became relentless enemies of slavery before the Civil War

5. Yet the Germans—often dubbed "damned Dutchmen"—were regarded with suspicion by their old-stock American neighbors; seeking to preserve their language and culture, they sometimes settled in compact "colonies" and kept aloof from the surrounding community

6. They were accustomed to the "Continental Sunday" and drank huge quantities of an amber beverage called bier (beer)—their Old World drinking habits, like the Irish, spurred advocates of temperance in the use of alcohol to redouble their reform efforts

F. Flare-ups of Antiforeignism

1. The invasion by this so-called immigrant "rabble" in the 1840s and 1850s inflamed the prejudices of American "nativists"—they feared that these foreign hordes would outbreed, outvote, and overwhelm the old "native" people of America

    1. Not only did the newcomers take jobs from "native" Americans, but the bulk of the displaced Irish were Roman Catholics, as were a substantial minority of the Germans

    2. The Church of Rome was still widely regarded by many old-line Americans as a "foreign" church; convents were commonly referred to as "popish brothels"

2. Roman Catholics were now on the move; seeking to protect their children from Protestant indoctrination in the public schools, they began in the 1840s to construct a separate Catholic educational system (expensive but revealed the strength of its commitment)

3. With the enormous influx of the Irish and Germans in the 1840s and 1850s, the Catholics became a powerful religious group; in 1840 they ranked fifth behind the Baptists, Methodists, Presbyterians, and Congregationalists but by 1850, they bounded into first

4. Older-stock Americans were alarmed by these mounting figures; they professed to believe that in due time the immigrants would establish the Catholic Church at the expense of Protestantism and would introduce "popish idols"

    1. The noisier American "nativists" rallied for political action; in 1849, they formed the Order of the Star-Spangled Banner, which soon developed into the formidable American, or "Know-Nothing," party—a name derived from its secretiveness

2. Nativists" agitated for rigid restrictions on immigration and naturalization for laws authorizing the deportation of alien paupers; promoted a lurid literature of exposure

3. There was occasional mass violence and the most frightful flare-up occurred during 1844 in Philadelphia were the Irish Catholics fought back against the threats of "nativists"—two Catholic churches had been burned and over fifty wounded

5. Immigrants were making America a more pluralistic society and perhaps it was small wonder that cultural clashes would occur by why weren't there more episodes?

    1. The vigorous growth of the economy in these years both attracted immigrants in the first place and ensured that they could claim their share of the American wealth

    2. They helped fuel economic expansion but without the newcomers, an agricultural United States might have just watched the Industrial Revolution in envy

G. The March of Mechanization

1. A group of gifted British inventors, beginning about 1750, perfected a series of machines for the mass production of textiles and this enslavement of steam multiplied the power of human muscles some ten-thousand fold and ushered in the modern factory system

    1. The Industrial Revolution was accompanied by a transformation in agricultural production and in the methods of transportation and communication

    2. The Factory system gradually spread from Britain to other lands and it took a generation or so to reach western Europe, and then the United States

2. The American Republic was slow to embrace the factory system because the virgin soil in America was cheap; labor was therefore generally scarce and enough nimble hands to operate machines were hard to fine—until immigrants began to pour ashore in the 1840s

3. Money for capital investment was not plentiful in pioneering America; raw materials lay undeveloped, undiscovered, or unsuspected—much of coal was imported from Britain

4. Just as labor was scarce, so were consumers—the young country at first lacked a domestic market large enough to make factory-scale manufacturing profitable
5. Established British factories provided cutthroat competition and posed another problem
6. The British also enjoyed a monopoly of the textile machinery, whose secrets they were anxious to hide from foreign competitors; parliament enacted laws to protect its economy
7. Not until the middle of the 19th century did the factories exceed output of the farms

H. Whitney Ends the Fiber Famine

1. Samuel Slater has been acclaimed the "Father of the Factory System"
    1. A skilled British mechanic, he was attracted by bounties being offered to British workers familiar with the textile machines; after memorizing the plans for the machinery, he escaped in disguise to America, where he won the back of Moses Brown, a Quaker capitalist in Rhode Island (he put into operation in 1791 the first efficient American machinery for spinning cotton thread)
    2. Although the mechanism was ready, where was the cotton fiber—process expensive
2. Another mechanical genius, Massachusetts-born Eli Whitney, now made his mark
    1. After graduating from Yale and journeying to Georgia, in 1793, he built a crude machine called the cotton gin that was 50 times more effective than the hand process
    2. Almost overnight the raising of cotton became highly profitable and the South was tied hand and foot to the throne of King Cotton; the insatiable demand for cotton revived the chains on the limbs of the downtrodden southern blacks
3. South and North both prospered; slave-driving planters cleared more acres for cotton, pushing the Cotton Kingdom westward off the depleted ride-water plains

4. Factories at first flourished most actively in New England, though they branched out into the more populous areas of New York, New Jersey, and Pennsylvania; the South's capital was bound up in slaves—its local consumers for the most part were desperately poor

5. New England was singularly favored as an industrial center for several reasons

    1. Dense population provided labor and accessible markets; shipping brought in capital; snug seaports made import of raw materials and export of finished products easy

    2. The Rapid rivers provided abundant water power to turn the cogs of the machines; by 1860 more than 400 million pounds of southern cotton poured annually into the gaping maws of over a thousand mills, mostly in the New England region

I. Marvels in Manufacturing

1. America's factories spread slowly until about 1807, when there began the fateful sequence of the embargo, nonintercourse, and the War of 1812

    1. Stern necessity dictated the manufacture of substitutes for normal imports, while the stoppage of European commerce was temporarily ruinous to Yankee shipping

    2. Generous bounties were offered by local authorities from home-grown goods

2. The manufacturing boomlet broke abruptly with the peace of Ghent in 1815

    1. British competitors unloaded their dammed-up surpluses at ruinously low prices

    2. Responding to the pained out-cries, Congress provided some relief when it passed the mildly protective Tariff of 1816—attempt to control the shape of the economy

3. As the factory system flourished, it embraced numerous other industries besides textiles

    1. Prominent among them was the manufacturing of firearms and here the wizardly Eli Whitney again appeared with an extraordinary contribution

2. About 1798, Whitney seized upon the idea of having machines make each part, so that muskets could be scrambled and reassembled—interchangeable parts

3. The principle of interchangeable parts was widely adopted by 1850 and it ultimately became the basis of modern mass-production, assembly-line methods

4. The sewing machines, invented by Elias Howe in 1846 and perfected by Isaac Singer, gave another strong boost to northern industrialization; the sewing machine became the foundation of the ready-made clothing industry, which took root near the Civil War

5. Each momentous new invention seemed to stimulate sill more imaginative inventions, patents in 1800 numbered only 306 patents but by the end of 1860, it totaled 28,000

6. Technical advances spurred equally important changes in the form and legal status of business organizations—the principle of limited liability aided the concentration of capital by permitting the individual investor to risk no more than his own share of stock

7. One of the earliest investment capital companies, the Boston Associates, eventually dominated the textile, railroad, insurance, and banking business of Massachusetts

8. Laws of "free incorporation," first passed in New York in 1848, meant that businessmen could create corporations without applying for individual charters from legislatures

9. Samuel F. B. Morse's telegraph was among the inventions that tightened the sinews of an increasingly complex business world; by the eve of the Civil War, a web of singing wires spanned the continent, revolutionizing news gathering, diplomacy, and finance

J. Workers and "Wage Slaves"

1. One bad outgrowth of the factory system was an acute labor problem; the industrial revolution submerged the personal association to the impersonal ownership of factories

2. Clearly the early factory system did now shower its benefits evenly on all

1. While many owners waxed fat, working people often wasted away at their workbenches; hours were long, wages were low, and meals were skimpy
2. Workers were forced to toil in unsanitary buildings and were forbidden by law to form labor unions for such activities were regarded as criminal conspiracies
3. Vulnerable to exploitation were child workers; in 1820 half the nation's industrial toilers were children under ten years of age; they were victims of factory labor

3. By contrast, the lot of most adult wage workers improved markedly in the 1820s and 1830s; in flush of Jacksonian democracy, many of the states granted the laborers the vote
4. As well as demanding the ten-hour day, higher wages, and tolerable working conditions, workers demanded public education for children and an end to imprisonment for debt
    1. Employers fought the ten-hour day to the last ditch and argued that reduced hours would lessen production, increase costs, and demoralize the workers—more free time
    2. A red-letter gain was at length registered for labor in 1840, when President Van Buren established the ten-hour day for federal employees on public works
5. Day laborers at last learned that their strongest weapon was to lay down their tools
    1. Dozens of strikes erupted in the 1830s and 1840s, most of them for higher wages, some for the ten-hour day, and a few for such unusual goals as right to smoke on job
    2. The workers usually lost more strikes than they won for the employer could resort to importing strikebreakers, often fresh off the boat from the Old World
    3. Labor's early and painful efforts at organization had netted some 300,000 trade unionists by 1830; but such gains were negated with the severe depression of 1837
    4. As unemployment spread, union membership shriveled; yet toilers won a promising legal victory in 1842 when the supreme court of Massachusetts

ruled in the case of *Commonwealth v. Hunt* that labor unions were not illegal conspiracies

5. The enlightened decision did not legalize the strike overnight but it was significant

K. Women and the Economy

1. Women were also sucked into the clanging mechanism of factory production; farm women and girls had an important place in the preindustrial economy, spinning yarn, weaving cloth, and making candles, soap, butter, and cheese
    1. New factories such as the textile mills undermined these activities, cranking out manufactured goods much faster than they could be made by hand at home
    2. Yet these same factories offered employment to the very young women whose work they were displacing; factory jobs promised greater economic independence
    3. Factory girls" typically toiled six days a week, earning work "from dark to dark"
    4. The Boston Associates pointed to their textile mill at Lowell, MA as a showplace factory where most workers were farm girls who were carefully supervised on and off
2. Opportunities for women to be economically self-supporting were scarce and consisted mainly of nursing, domestic service, and especially teaching
    1. Catharine Beecher tirelessly urged women to enter the teaching profession; she eventually succeeded beyond her dreams, as men left teaching for other lines of work and school teaching became a thoroughly "feminized" occupation
    2. About 10% of white women were working for pay outside their won homes in 1850, and estimates are that about 20% of all women had been employed before marriage
3. The vast majority of workingwomen were single; upon marriage, they left their paying jobs and took up their new work as wives and mothers (they were enshrined in a "cult of domesticity" a widespread cultural creed that glorified functions of the homemaker)

4. From their pedestal, married women commanded immense moral power and they increasingly made decisions that altered the character of the family itself
5. Women's changing roles and the spreading Industrial Revolution brought some important changes in the life of the nineteenth-century changes in the life of the 19th century home
6. Women's changing roles and the spreading Industrial Revolution brought some important changes in the life of the nineteenth-century home—the tradition "women's sphere"
    1. Love, not parental "arrangement" more and more frequently determined the choice of a spouse—yet parents often retained the power of veto; families more closely knit
    2. Most striking, families grew smaller; the "fertility rate," or number of births among women age fourteen to forty-five, dropped sharply among white women in the years after the Revolution and in the course of the 19th century as a whole, fell by half
    3. Women undoubtedly played a large part in decisions to have fewer children
    4. This newly assertive role for women has been called "domestic feminism" because it signified the growing power and independence of women ("cult of domesticity")
7. Smaller families, in turn, meant child-centered families, since where children are fewer, parents can lavish more care on them individually; lessons were enforced by punishments other than the hickory stick (shaping the child instead of just breaking the child)
8. In the little republic of the family, good citizens were raised not to be meekly obedient to authority, but to be independent individuals who could make their own decisions on the basis of internalized moral standards (small, affectionate, child-centered modern family)

L. Western Farmers Reap a Revolution in the Fields

1. The trans-Allegheny region—especially the Ohio-Indiana-Illinois tier—was becoming the nation's breadbasket and before long it would become a granary to the world

1. Pioneer families first planted their painfully uneven fields to corn; the yellow grain was amazingly versatile and could be fed to hogs or distilled into liquor
2. Both these products could be transported more easily than the bulky grain and they became the early western farmer's staple market items (trade of hogs)

2. Most western produce was at first floated down the Ohio-Mississippi River system, to feed the lusty appetite of the booming Cotton Kingdom but western farmers were as hungry for profits as southern slaves and planters were for food (cultivated more land)
3. Ingenious inventors came to the air of these western tillers
    1. One of the first obstacles that frustrated the farmers was the thickly matted soil of the West, which snapped fragile wooden plows and John Deere of Illinois in 1827 finally produced a steel plow; sharp and effective, it was light enough to be pulled by horses
    2. In the 1830s, Cyrus McCormick contributed the most wondrous contraption of all: a mechanical mower-reaper; the clattering cogs of his horse-drawn machine were to western farmers what the cotton gin was to southern planters
    3. Seated on his reaper, a single man could do the work of five men with scythes
4. The mower-reaper made ambitious capitalists out of humble plowmen who now scrambled for more acres on which to plant more fields of billowing wheat
5. Subsistence farming gave way to production for the market, as large-scale, specialized, cash-crop agriculture came to dominate the trans-Allegheny West; soon hustling farmer-businesspeople were annually harvesting a larger crop than the South could devour
6. They began to dream of markets elsewhere but they were still largely land-locked; commerce moved north and south on the river systems; before it could begin to move east-west in bulk, a transportation revolution would have to occur

M. Highways and Steamboats

1. In 1789, primitive methods of travel were still in use; waterborne commerce, whether along the coast or on the rivers, was slow, uncertain, and often dangerous
2. Cheap and efficient carriers were imperative if raw materials were to be transported to factories and if finished products were to be delivered to consumers
3. A promising improvement came in the 1790s, when a private company completed the Lancaster Turnpike in Pennsylvania; a broad hard-surfaced highway from Philly to Lancaster; as drivers approached the tollgate, they were confronted with a barrier of sharp pikes, which were turned aside when they paid their toll—hence the term *turnpike*
    1. The Lancaster Turnpike proved to be a highly successful venture, returning as high as 15 percent annual dividends to its stockholders; it attracted a rich trade to Philadelphia and touched off a turnpike-building boom that lasted about twenty years
    2. The turnpike also stimulated western development and beckoned to the canvas-covered Conestoga wagons, whose creakings herald a westward advance
4. Western road building, always expensive, encountered many obstacles
    1. One pesky roadblock was the noisy states' righters, who opposed federal aid to local projects; Eastern states also protested against their populations moving westward
    2. Westerners scored a notable triumph in 1811 when the federal government began to construct the elongated National Road, or Cumberland Road
    3. This highway ultimately stretched from Cumberland, in western Maryland, to Vandalia, in Illinois, a distance of 591 miles; War of 1812 interrupted construction and states' rights shackles on internal improvements hampered federal grants
    4. But the thoroughfare was finally, belatedly brought to its destination in 1852 by a combination of aid from the states and the federal government
5. The steamboat craze, which overlapped the turnpike craze, was touched off by an ambitious painter-engineer named Robert Fulton who installed a powerful

steam engine in a vessel that posterity came to know as the *Clermont* but was dubbed “Fulton’s Folly”

6. On a historic day in 1807, the little ship churned steadily from New York City up the Hudson River toward Albany and made the run of 150 miles in 32 hours
7. The success of the steamboat was sensational; people could now in large degree defy wind, wave, tide, and downstream current (within years, carrying capacity doubled)
    1. As keelboats had been pushed up the Mississippi at less than one mile an hour, a process that was prohibitively expensive, now the steamboats could churn rapidly against eh current, ultimately attaining speeds in excess of ten miles an hour
    2. By 1820 there were some sixty steamboats on the Mississippi and by 1860 about one thousand; keen rivalry among the swift and gaudy steamers led to memorable races
    3. Chugging steamboats played a vital role in the opening of the West and South, both of which were richly endowed with navigable rivers (population clusters)

N. Clinton’s Big Ditch” in New York

1. A canal-cutting craze paralleled the boom in turnpikes and steamboats
    1. A few canals had been built around falls and elsewhere n the colonial days; resourceful New Yorkers, cut off from federal aid by states’ righters, themselves dug the Erie Canal, linking the Great Lakes with the Hudson River
    2. They were blessed with the driving leadership of Governor DeWitt Clinton, whose grandiose project was called “Clinton’s Big Ditch” or “the Governor’s Gutter”
    3. Begun in 1817, the canal eventually ribboned 363 miles and on its completion in 1825, a garlanded canal boat glided from Buffalo, on Lake Erie, to the Hudson River and on to New York harbor—water from Clinton’s keg baptized the Empire state
    4. Mule-drawn passengers and bulky freight could now be handled with thrift and dispatch, at the dizzy speed of five miles an hour (cost of shipping fell drastically)

2. Ever-widening economic ripples followed the completion of the Erie Canal; the value of land along the route skyrocketed and new cities (Rochester, Syracuse) blossomed

    1. Industry in the state boomed; the new profitability of farming in the Old Northwest attracted thousands of European immigrants to the unaxed and untaxed lands there

    2. Other profound economic and political changes followed the canal's completion

    3. The price of potatoes in NYC was cut in half, and many dispirited New England farmers, no longer able to face the ruinous competition, abandoned their holdings

    4. Some because mill hands, thus speeding the industrialization of America and others, finding it easy to go west over the Erie Canal, took up new farmland south of the Great Lakes; still others shifted to fruit, vegetable, and dairy farming

O. The Iron Horse

1. The most significant contribution to the development of such an economy proved to be the railroad; it was cheaper than canals to construct, and not frozen over in the winter

    1. Able to go almost anywhere, even through the Allegheny barrier, it defied terrain and weather; the first railroad appeared in the United States in 1828 and by 1860, the United States boasted thirty thousand miles of railroad track; ¾ of it in the North

    2. At first the railroad faced strong opposition from vested interests, especially canal backers; early railroads were also considered a dangerous public menace for flying sparks could set fire to nearby haystacks and houses and fear railway accidents

2. Railroad pioneers had to overcome other obstacles as well; brakes were so feeble that the engineer might miss the station twice, both arriving and back; distance between the rails meant frequent changes of trains for passengers; but gauges soon became standardized, better brakes did brake, safety devices were adopted, and luxury trains introduced

P. Cables, Clippers, and Pony Riders

1. Other forms of transportation and communication were binding together the United States and the world; a crucial development came in 1858 when Cyrus Field finally stretched a cable under the deep North Atlantic waters from Newfoundland to Ireland
2. Although this initial cable went dead after three weeks of public rejoicing, a heavier cable laid in 1866 permanently linked the American and European continents
3. The United States merchant marine encountered rough sailing during much of the early nineteenth century; American vessels had been repeatedly laid up by the embargo, the War of 1812, and the panics of American in the years of 1819 and 1837
4. In the 1840s and 1850s, a golden age dawned for American shipping
    1. Yankee naval yards, notably Donald McKay's at Boston, began to send down the ways sleek new craft called clipper ships—they glided across the sea under towering masts and clouds of canvas; in a fair breeze, they could outrun any steamer
    2. The stately clippers sacrificed cargo space for speed, and their captains made killings by hauling high-value cargoes in record times; they wrested much of the tea-carrying trade between the Far East and Britain from their slower-sailing British competitors
    3. The hour of glory for the clipper was relatively brief as on the eve of the Civil War, the British had clearly won the world race for maritime ascendancy with their iron tramp steamers; although slower and less romantic, they were more reliable/roomier
5. Rapid American communication would be complete by including the Far West
    1. By 1858 horse-drawn overland stagecoaches were a familiar sight and their dusty tracks stretched from the bank of the Missouri River clear to California
    2. Even more dramatic was the Pony Express, established in 1860 to carry mail speedily the two thousand lonely miles from St. Joseph, Missouri, to Sacramento, California
    3. Daring lightweight riders, leaping onto wiry ponies saddled at stations approximately ten miles apart, could make the trip in an amazing ten days (folded after 1.5 years)

6. The express riders were unhorsed by Samuel Morse's clacking keys, which began tapping messages to California in 1861—dying technology of wind and muscle

Q. The Transport Web Binds the Union

1. The desire of the East to tap the West stimulated the "transportation revolution"
    1. Until about 1830 the produce of the western region drained southward to the cotton belt but the steamboat vastly aided the reverse flow of finished goods up the watery western arteries and helped bind West and South together
    2. But the truly revolutionary changes in commerce and communication came in the three decades before the Civil War, as canals and railroad tracks radiated out from the East, across the Alleghenies and into the blossoming heartland
    3. They would offset the "natural" flow of trade by a grid of "internal improvements"
2. The builders succeeded beyond their wildest dreams; the Mississippi was increasingly robbed of its traffic; by the 1840s the city of Buffalo handled more western produce than New Orleans; New York City became the seaboard queen of the nation (huge port)
3. By the eve of the Civil War, the principle of division of labor, which spelled productivity and profits in the factory, applied on a national scale too (each region was specialized)
    1. The South raised cotton for export to livestock to feed factory workers in the East and in Europe; the East mad machines and textiles for the South and the West
    2. Many Southerners regarded the Mississippi as the chain linking the North and South

R. The Market Revolution

1. The "market revolution" transformed a subsistence economy of scattered farms and tiny workshops into a national network of industry and commerce

    1. as more and more Americans linked their economic fate to the burgeoning market economy, the self-sufficient households of colonial days were transformed
    2. In growing numbers they now scattered to work for wages in the mills, or they planted just a few crops for sale at market and used the money to buy goods made by strangers in far-off factories (store-bought products replaced homemade products)
2. A quiet revolution occurred in the household division of labor and status
    1. Traditional women's work was rendered superfluous and devalued; the home itself, once a center of economic production in which all family members cooperated, grew into a place of refuge from the world of work—special and separate sphere of women
    2. Revolutionary advances in manufacturing and transportation brought increased prosperity to all Americans, but they also widened the gulf between the rich and poor
3. Cities bred the greatest extremes of economic inequality; unskilled workers fared worst and many of them came to make up a floating mass of "drifters," buffeted from town to town by the shifting prospects for menial jobs—accounted for brawling industrial centers
4. Although their numbers were large, they left little behind them; many myths about "social mobility" grew up over the buried memories of these unfortunate day laborers; rags-to-riches success stories were relatively few but there was not excessive mobility
5. Yet America, with its dynamic society and wide-open spaces, undoubtedly provided more "opportunity" than the contemporary countries of the Old World; general prosperity helped defuse the potential class conflict that might otherwise have explode