Notes on Economic Development and Expansion:

The success of American economic development has depended on a number of factors, among them a hospitable geographic environment and the development of transportation networks that connect the many parts of an integrated economic structure. At the beginning of the 19th Century the lack of reliable, low-cost transportation greatly limited economic development. The first important advance was the building of either graded and planked or macadamized (paved) turnpikes or toll roads by private corporations. By the 1820s, the Baltimore Turnpike extended to Cumberland, and the National Road to Wheeling and then to Vandalia, Illinois.

Turnpikes somewhat reduced the cost of transporting freight, but because water transportation was still cheaper, farmers often shipped their produce downstream. Steam power was the solution to improving upstream travel. And of course, the construction of canals connecting major waterways led the economic boom. Within a short time of the completion of the 350 mile-long Erie Canal, the cost of transporting a ton of freight between New York City and Buffalo fell from nearly twenty cents to under two cents.

This explosive transportation revolution inevitably was disruptive to social life, but Americans quickly learned to regard change of this sort as normal. People grew accustomed to boom towns and developed ways of coping with their problems. Some of the very first boom towns developed as a result of the Erie Canal. The construction of the canal began the process as hundreds and thousands of laborers descended on previously sleepy villages. Shantytowns shot up; saloons appeared as if by magic, as did bordellos. The construction workers, for the most part, moved on as soon as a section of the canal was finished. But their places were taken by boat hands, teamsters, and other workers. This growth brought prosperity; land-owners and merchants became rich overnight. Manufacturers moved into the towns. Jobs were plentiful. But massive problems emerged simultaneously. Housing was in short supply, as were schools and churches. Opportunities for recreation were limited to the saloons and houses of ill repute. Workers and employers lived in separate neighborhoods and regarded each other as enemies. Violence was commonplace and so were fires.

The Erie had an enormous impact on American economic development quite apart from the improvement in transportation it brought. It was the first major project that required modern engineering skills. Grading had to be measured exactly, new kinds of locks designed and built, and all had to be constructed to last for a generation. So the first generation of American engineers learned their profession on the job. And, these skills were the ones which rapid industrialization would require. For the next thirty years, the graduates of the Erie Canal would build the nation's railroads and machines.

The transportation revolution opened up a large new potential market for manufactured products, but where were the workers to produce these goods? Labor had always been in short supply in America. Cheap land was so available that people could work their own land instead of hiring out their labor. In 1800, only 10% of the white labor force were people who sold their labor. The domestic or “putting out” system allowed manufacturers to tap a tremendous pool of part-time labor, especially women and children. Other businesses tried to centralize production, hiring whole families whom they housed in tenements. As factories grew larger, requiring a labor force of hundreds, owners turned increasingly to the Waltham system. This was the first systematic attempt in the US at industrialization. Lowell and his colleagues were determined to avoid the horror of British industrialization---the slums and the impoverished working class. And for a time they succeeded. They built housing for their workers, paid good wages, and strove to maintain a high moral tone in the new factory towns.

The Waltham system, in other words, promised to combine profitability and responsible social policies. This promise was realized for a short time as Davey Crockett testified after a tour in 1834. He described Lowell’s “mile of gals” as “well dressed, lively and genteel and happy in their work.”
The critical test of the system came when the depression following the Panic of 1837 forced the investors to reexamine their commitment to high wages and exemplary working conditions. As business fell off, the temptation to cut wages became irresistible. And cheaper labor was easily available. Irish immigrants had built factories, canals, and railroads. They lived not in the factory dormitories but in the shanty-towns on the outskirts of Lawrence, Lowell, and other mill towns. And they would work for less. So the Waltham system fell apart under the pressure of economic contraction.

The episode is revealing because it illustrates one of the basic issues to face American capitalism: how were progress and profit to be combined? Again and again businessmen would face the same choice that confronted Waltham investors. Again and again they would make it the same way. Economic pressure and the glut of immigrant labor quickly eroded the paternalistic spirit of early industrialization. “I regard people just as I regard my machinery,” a manufacturer explained in 1855:

“So long as they can do my work for what I choose to pay them, I keep them, getting out of them all I can. What they do or how they fare outside my wall I don’t know, nor do I consider it my business to know. They must look out for themselves as I do for myself. When my machines get old and useless, I reject them and get new, and these people are part of my machinery.”

Neither the factory system nor the great canal and railroad projects of the period could have been created without this foreign labor. Between 1830 and 1850, immigrants supplied nearly half the increase in the free working force. But exploitation brought poverty, disease and crime.

From Artisan’s republic to the factory system

When Philadelphia celebrated the newly ratified U.S. constitution in 1791, masters, journeymen and apprentices marched through the streets under banners that announced the unity reigning within each craft—only seventy years later, in the era when northern men rallied in support of the Union, urban workmen no longer felt it possible to march in the same ranks with merchants and manufacturers who now employed them. In 1865, most Americans were farmers and artisans working in traditional ways still produced most manufactured goods. But the egalitarianism of the early 19th Century workshop had been replaced by a gaping social chasm that divided wage laborers in almost every trade from the factory owners and great merchants of the Civil War era.

The world of artisans had been characterized by small-scale production, local markets, skilled craftsmanship and a self-reliant sense of community and citizenship. Early 19th Century workmen thought of themselves as masters both in their household and in their trade, the upholders of an equal-rights tradition whose roots stretched back to the American revolution. White women, blacks and unskilled immigrants would obviously have an ambiguous relationship to this tradition. Still, republicanism—the ideology that links civil virtue and personal independence to self government, was a powerful standard by which these men judged and rejected the new men of wealth and power, who seemed to rise so quickly and to challenge so dramatically the values and livelihood of America’s producing classes.

Factories, banks, railroads and mines did not appear overnight. For many years, large, mechanized enterprises existed alongside extensive systems of home production and the craft-based trades. In fact, the process of industrialization had a patchwork quality that de-skilled and depressed some trades and skipped others entirely. In New York and Philadelphia, a process of “metropolitan industrialization” created a heterogeneous working class divided by skill, race, sex and nationality. In contrast, the textile industry, which put its mills on isolated sites along the New England rivers, generated a more homogeneous class of workers.

In general, workers found it difficult to establish common ground upon which to fight the factory system and the hated “wage slavery.” The increasing division of labor and employer hiring practices combined with the other sources of tension—race, gender, nationality to weaken collective efforts. This led many workers to turn to the state rather than their own organizations to fight the factory system.