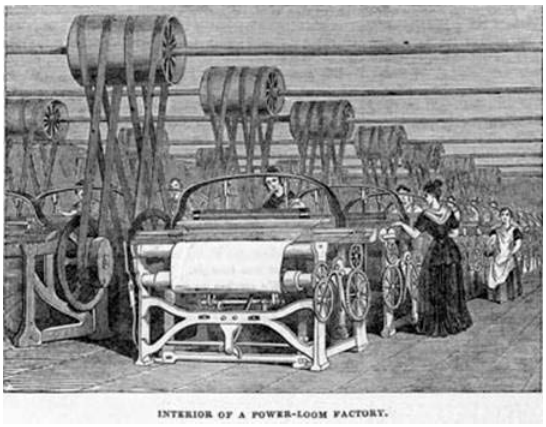
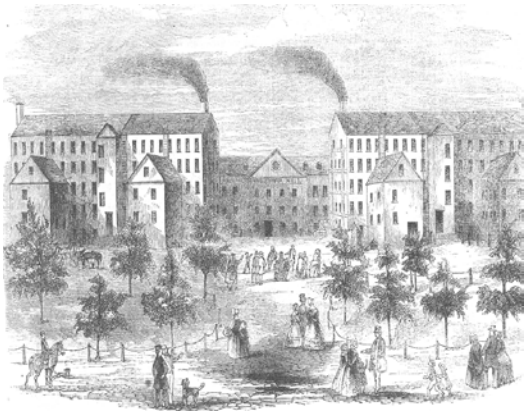
TAH Industrialization Lowell Name:_____ date


INTERIOR OF A POWER-LOOM FACTORY.



Starter Please Read Why a Factory? :

Factories are places that rely on the division of labor to mass-produce items for a profit. They often rely on machines (as well as people) to produce items more cheaply than would be possible if the goods were produced by a craftsman. Factories didn't come into existence automatically, as if there were no other possible ways to organize production, and that is particularly true for cloth making. In England, for example, cloth merchants often "put out" raw materials to artisans who worked at home or in shops where several people would labor together. Some things--straw hats and shoes, for instance--were made that way in America, too. But most early textile factories in this country tended to emerge from two lines of development. In one case, they grew out of existing water-powered milling operations. So, for instance, a miller added a carding machine to the equipment of a grist mill or saw mill, drawing upon the water power already in use at the site. That experiment then often led an owner to introduce some of the new spinning machines and power looms, in many cases taking out the older grist or saw mill machinery, and by such a process a textile mill was created. These kinds of factories were often small and oriented to local markets. By 1815 there were lots of them, especially in southern New England.

In the second case, textile factories were established as complete enterprises from the beginning, depending on the development of new power sources and the identification of new populations of labor. This is what happened at Waltham, MA in 1813, at Lowell, MA in 1822, and then later at Manchester, NH, and other places in northern New England. The men who established these factories were originally looking for new kinds of investments because the shipping they were engaged in had become too risky during the early 19th century as a result of the international hostilities which led up to and continued during the War of 1812. These merchants were able to combine large amounts of capital (which were unavailable to almost everyone else in the United States) with powerful water sources to create large factories oriented towards national markets.

From an investor's or a manager's point of view, the advantages of combining raw materials, workers, machines, and power--all under one roof--were obvious. One of the first benefits was better supervision of workers and work processes. Someone working at home without the pressure of immediate supervision might not work as hard or as regularly. Working and drinking (not an uncommon practice in some early industries) could also result in less than perfect yarn or cloth. With workers in a single place for 11-to-13 hours a day, almost all these problems could be minimized, giving managers a more predictable output-per-week at a lower cost-per-yard.

Employing the new textile machinery in a water-powered factory setting provided huge gains in productivity and that was another important benefit for mill owners. Single spinning machines and power looms spun and wove much faster than individuals could; assembling a great many of these machines, with each worker tending several at once, multiplied the possibilities for profits. Here is an important difference from plantations, where gains in productivity came only by adding more workers.

But like plantation owners, factory managers also had to be concerned with discipline, to insure control over production. Small factories employed families, relying primarily on the labor of children (usually between the ages of 10 and 20) to produce cloth. The large factories of places like Lowell employed young women (usually between the ages of 13 and 25) to produce their cloth. In both cases, factory managers argued that these groups of people needed close supervision because they could not be trusted to take care of themselves. Some owners argued that poor families who did not work in factories would only become idle, immoral, and even criminal. Those who employed young women in places such as Lowell did not feel that these young women were likely to become immoral, but they did feel that the women needed to live in boarding houses with strict rules of behavior, and they certainly never expected these young women to move up the factory ladder to become overseers, much less owners. Although factory workers were given more independence than slaves, factory owners still looked down upon them. However, in the North, factory owners paid wages to their workers (or the parents of

their workers where family labor was used). They expected their workers to provide their own food and clothing and they expected their workers to depend on family members for support in a time of crisis. In this way, northern workers were treated differently from slaves. Factory owners only claimed to own the labor of their employees, not their whole person.

Cotton production resulted in the spread of slavery; textile production resulted in the beginnings of a class of factory workers who had limited prospects in the industrial world. In the South, slave owners looked down on slaves because of their race; in the North, factory owners looked down on operatives because of their economic background (class) and because they were female. Many northern factory workers were no more enamored of their jobs than slaves were of theirs. Indeed, they sometimes called themselves wage slaves. Factory workers organized collectively to resist unfair labor conditions more regularly than slaves did, no doubt because the consequences for such behavior were less severe than on southern plantations. But factory workers also engaged in day-to-day resistance by quitting their jobs and by working more slowly than their overseers demanded. Thus factories, like plantations, were set up to increase profits for their owners. However, factories increased profits not only through the organization of labor, but through the development and spread of technology.

So if you were an investor in 1820 why might a factory appeal to you?_____

_____

_____

Which was the better investment factory or plantation why? _____

_____

_____

Discuss

Take Notes from PPT presentation Lowell Girls

Play Activity #10: Industrial Life: A Game

Description

In this board game about life during early industrialization, you will assume the role of either a mill owner or a factory worker and encounter the real historical events and technological opportunities of the period.

Special Explanation and Discussion Questions

This game may not seem as "fair" as other games you have played. That's because people do not get to start on an equal footing. However, during early industrialization people did not get to start on an equal footing either. In fact, in order to show you the range of possible jobs people could have in a mill, we have included a far higher percentage of well paid and wealthy players than would have actually existed in any given mill. The overwhelming majority of those who worked in factories were low-paid operatives. We have also allowed the young women in this game opportunities that would not really have existed for young women in the early 19th century. It is possible for Mary and Eleanor to borrow money and buy a mill, apprentice to a mechanic, become an overseer, and to patent a loom in our game. It is very unlikely that any of these things would have really happened in the 19th century.

After we have played we will discuss these questions

Discussion Questions

- How did the development of technology and/or historical events affect the lives of ordinary people? Do you see any relation to today?
- What were some of the ways ordinary people could become upwardly mobile during this period? How can you do it today?
- What did you learn about business and handling money from this game?
- What did you learn about life during early industrialization? Do you see any parallels to today?

Materials needed

The Game Board, Identity Cards, There are two pages of four Identity cards each. Click on a page to see the characters. These can be downloaded, printed, and cut out.

Alexander, Mary, Samuel, Michael James, Robert, Eleanor, Henry
Score Sheet
Click to view an image of the Score Sheet that can be saved and printed.

Game Rules
1. This game will work best with six to eight players.

2. Notice that the game begins in 1806 and proceeds until the middle of the 183O's with historical events appearing in order.

3. To begin, each player chooses an IDENTITY CARD and enters the information on the PLAYER SCORE SHEET, then chooses a player token and rolls the die to determine playing order. High throw begins, with play proceeding clockwise.

4. All players travel the RED PATH with a player token unless they choose to buy a MILL (token) and begin the game on the BLUE PATH. (see #6)

5. Players collect a salary every time they either pass or land on a PAYDAY square. If they land on a salary adjustment square, that adjustment applies to the NEXT PAYDAY. Players who land on "lose payday" squares continue to move their tokens in play and make salary adjustments, but do not collect any money for the PAYDAYs they pass or land on. Keep track of salary adjustments and PAYDAYs on the PLAYER SCORE SHEET (on reverse).

6. At the start of his/her turn, any player may choose to buy a MILL, exchange the player token for a MILL token, and begin on the BLUE PATH. MILLs cost $25,OOO and the mill owner's BASE SALARY is $1O,OOO each PAYDAY. For the purpose of determining net assets at the end of the game, MILLs are valued at half their cost - $12,500.

7. Each player may borrow up to $2O,OOO during the course of the game. These debts must be paid (subtracted) from the player's assets at the end of the game. Keep track of loans in the space provided on the PLAYER SCORE SHEET.

8. Play ends when (a) the class period ends, (b) when the first player finishes a PATH, or (c) when all players finish their PATHs - whichever the teacher and students decide is most convenient.

9. The player who has the most assets at the end of the game wins.

10. Players will need pencils and may use calculators or scratch paper for calculations.