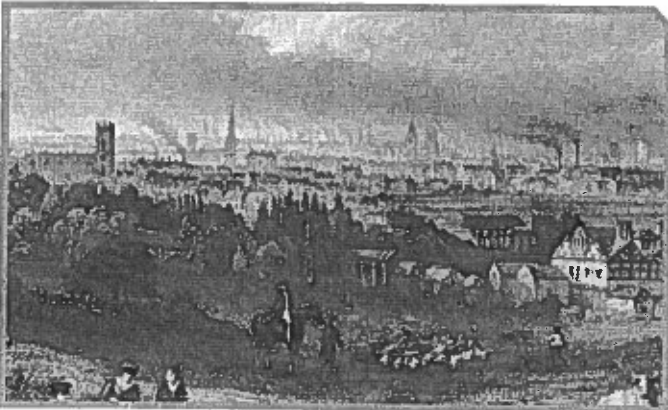




## Urbanization

One of the defining and most lasting features of the Industrial Revolution was the rise of cities. In pre-industrial society, over 80% of people lived in rural areas. As migrants moved from the countryside, small towns became large cities. By 1850, for the first time in world history, more people in a country—Great Britain—lived in cities than in rural areas. As other countries in Europe and North America industrialized, they too continued along this path of urbanization. By 1920, a majority of Americans lived in cities. In England, this process of urbanization continued unabated throughout the 19th century. The city of London grew from a population of two million in 1840 to five million forty years later (Hobsbawm, *Industry and Empire* 159).



The small town of **Manchester**, England also grew rapidly and famously to become the quintessential industrial city. Its cool climate was ideal for textile production. And

it was located close to the Atlantic port of Liverpool and the coalfields of Lancashire. The first railroads in the world later connected the textile town to Liverpool. As a result, Manchester quickly became the textile capital of the world, drawing huge numbers of migrants to the city. In 1771, the sleepy town had a population of 22,000. Over the next fifty years, Manchester's population exploded and reached 180,000 ("A History of Manchester"). Many of the migrants were destitute farmers from Ireland who were being evicted from their land by their English landlords. In Liverpool and Manchester roughly 25 to 33 percent of the workers were Irish. (Thompson 429).

This process of urbanization stimulated the booming new industries by concentrating workers and factories together. And the new industrial cities became, as we read earlier, sources of wealth for the nation.

Despite the growth in wealth and industry urbanization also had some negative effects. On the whole, working-class neighborhoods were bleak, crowded, dirty, and polluted. Alexis de Tocqueville, a French traveller and writer, visited Manchester in 1835 and commented on the environmental hazards. "From this foul Drain the greatest stream of human industry flows out to fertilize the whole world. From this filthy sewer pure gold flows. Here humanity attains its most complete development and its most brutish, here civilization works its miracles and civilized man is turned almost into a savage." (Hobsbawm, *The Age of Revolution* 44)

Click on the links of the primary source accounts of the urban pollution in Manchester and London.

**Primary Source: A Letter to the Editor of the *London Times* by Professor Michael Faraday, published on July 7, 1855 (Faraday)**

“Observations on the Filth of the Thames”

SIR,

I traversed this day by steam-boat the space between London and Hangerford Bridges between half-past one and two o'clock; it was low water, and I think the tide must have been near the turn. The appearance and the smell of the water forced themselves at once on my attention. The whole of the river was an opaque pale brown fluid. . . . The smell was very bad, and common to the whole of the water; it was the same as that which now comes up from the gully-holes in the streets; the whole river was for the time a real sewer. Having just returned from out of the country air, I was, perhaps, more affected by it than others; but I do not think I could have gone on to Lambeth or Chelsea, and I was glad to enter the streets for an atmosphere which, except near the sink-holes, I found much sweeter than that on the river.

I have thought it a duty to record these facts, that they may be brought to the attention of those who exercise power or have responsibility in relation to the condition of our river; there is nothing figurative in the words I have employed, or any approach to exaggeration; they are the simple truth. . . . surely the river which flows for so many miles through London ought not to be allowed to become a fermenting sewer

Sincerely,

Professor Faraday

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What role, if any, do you think the government should take to improve conditions in the new industrial cities? Choose the answer that best represents your point of view:

1. The government should not intervene in the free market to regulate industrial pollution or the filth in working-class neighborhoods. The government did not force migrants to come to the cities; they came of their own free will. As the economy grows, the workers will earn better wages and have the resources to improve their neighborhoods or move to better ones.
2. The government should establish a commission to investigate the negative effects of industrialization on urban life. It is the government's responsibility to look out for the common good; polluted rivers and neighborhoods have an effect on all citizens.

## Living conditions

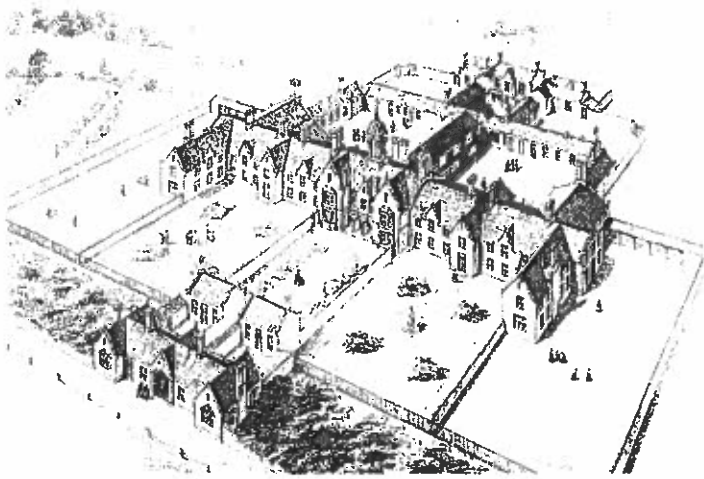
Working in new industrial cities had an effect on people's lives outside of the factories as well. As workers migrated from the country to the city, their lives and the lives of their families were utterly and permanently transformed.



For many skilled workers, the quality of life decreased a great deal in the first 60 years of the Industrial Revolution. Skilled weavers, for example, lived well in pre-industrial society as a kind of middle class. They tended their own gardens, worked on textiles in their homes or small shops, and raised farm animals. They were their own bosses. One contemporary observer noted, "their dwelling and small gardens clean and neat, —all the family well clad, —the men with each a watch in their pocket, and the women dressed in their own fancy, — the Church crowded to excess every Sunday, —every house well furnished with a clock in elegant mahogany or fancy case. . . . Their little cottages seemed happy and contented. . . . it was seldom that a weaver appealed to the parish for a relief. . . peace and content sat upon the weaver's brow" (Thompson 269). But, after the Industrial Revolution, the living conditions for skilled weavers significantly deteriorated. They could no longer live at their own pace or supplement their income with gardening, spinning, or communal harvesting. For skilled workers, quality of life took a sharp downturn: "A quarter

[neighborhood] once remarkable for its neatness and order; I remembered their whitewashed houses, and their little flower gardens, and the decent appearance they made with their families at markets, or at public worship. These houses were now a mass of filth and misery" (269).

In the first sixty years or so of the Industrial Revolution, working-class people had little time or opportunity for recreation. Workers spent all the light of day at work and came home with little energy, space, or light to play sports or games. The new industrial pace and factory system were at odds with the old traditional festivals which dotted the village holiday calendar. Plus, local governments actively sought to ban traditional festivals in the cities. In the new working-class neighborhoods, people did not share the same traditional sense of a village community. Owners fined workers who left their jobs to return to their villages for festivals because they interrupted the efficient flow of work at the factories (Stearns 73-74). After the 1850s, however, recreation improved along with the rise of an emerging the middle class. Music halls sprouted up in big cities. Sports such as rugby and cricket became popular. Football became a professional sport in 1885. By the end of the 19th century, cities had become the places with opportunities for sport and entertainment that they are today (Hobsbawm, *Industry and Empire* 164).



During the first 60 years of the Industrial Revolution, living conditions were, by far, worst for the poorest of the poor. In desperation, many turned to the **"poorhouses"** set up by the government. The Poor Law of 1834 created workhouses for the destitute. Poorhouses were designed to be deliberately harsh places to discourage people from staying on "relief" (government food aid). Families, including husbands and wives, were separated upon entering the grounds. They were confined each day as inmates in a prison and worked every day. One assistant

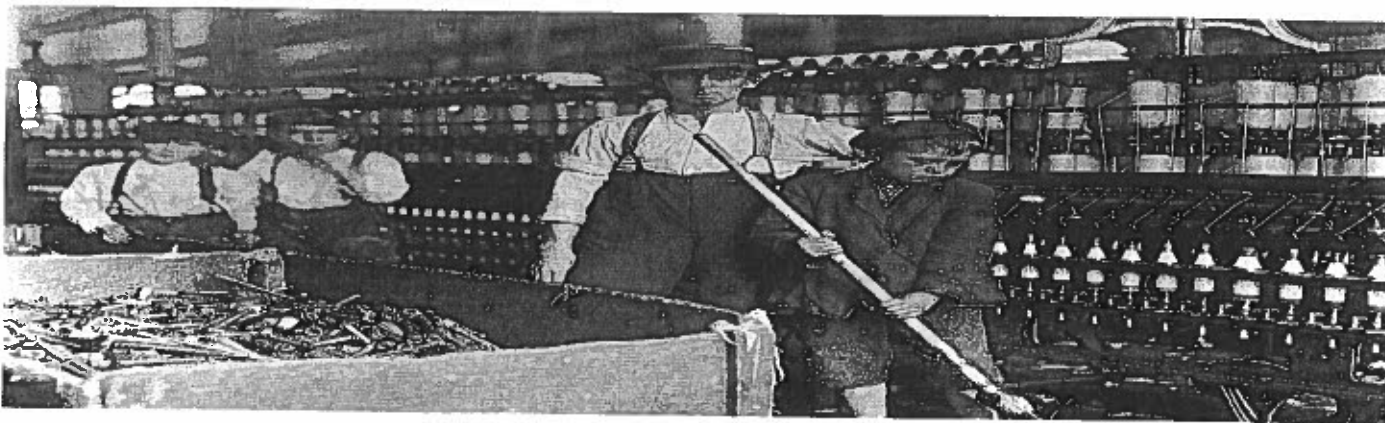
commissioner of the workhouses commented, "Our intention is to make the workhouses as much like prisons as possible." Another said, "Our object is to establish a discipline so severe and repulsive as to make them a terror to the poor and prevent them from entering" (Thompson 267). Yet, despite these very harsh conditions, workhouse inmates increased from 78,536 in 1838 to 197,179 in 1843 (268). This increase can only be viewed as a sign of desperation amongst the poorest of the poor.

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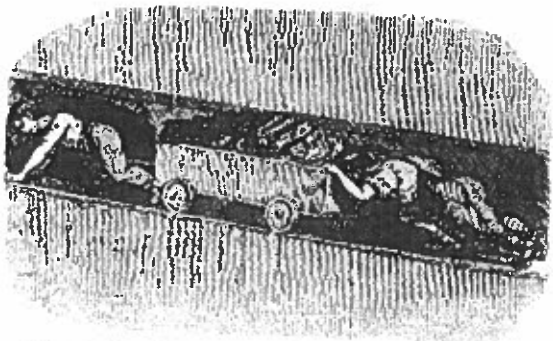
What role, if any, do you think the government should take to improve living conditions in the new industrial cities? Choose the answer that best represents your point of view:

1. The government should intervene as little as possible to improve living conditions for the working class. If the government gives handouts to the poor, there will be no incentive for them to find work on their own. Therefore, poorhouses must pay for themselves through the work of the poor. The free market has proven that hand weavers cannot compete with new textile machines, so they need to find new jobs in the new industrial economy. The longer they wait to do so, the worse it will be for them. Capitalism rewards those who work hard, persevere, and look for opportunities to succeed.
2. The government should at least help provide training for skilled workers, such as hand weavers, who lost their jobs to new industrial machines. By helping workers make the transition to new industrial jobs, governments will prevent workers from having to end up at poor houses or on parish relief.

# Child Labor



Child labor was, unfortunately, integral to the first factories, mines, and mills in England. In textile mills, as new power looms and spinning mules took the place of skilled workers, factory owners used cheap, unskilled labor to decrease the cost of production. And, child labor was the cheapest labor of all. Some of these machines were so easy to operate that a small child could perform the simple, repetitive tasks. Some maintenance tasks, such as squeezing into tight spaces, could be performed more easily by children than adults. And, children did not try to join workers unions or go on strike. Best of all, they were paid 1/10 of what men were paid. It's not surprising, then, that children were heavily employed in the first factories in history. In 1789, in Richard Arkwright's new spinning factory, two-thirds of 1,150 factory workers were children. (Ashton 93)



The tedious and dangerous factory work had negative effects on the health of children. Doctor Turner Thackrah described the children leaving the Manchester cotton mills as "almost universally ill-looking, small, sickly, barefoot and ill-clad. Many appeared to be no older than seven. The men, generally from sixteen to twenty-four, and none aged, were almost as pallid and thin as the children" (Thompson 329) Observations such as

these slowly made their way to the British government.

In the 1830s, the British Parliament began investigating the conditions in factories for children. One Member of Parliament, Michael Sadler, started a committee, in 1832, to send investigators out to factories to interview children and gather evidence about their working conditions. Sadler sought to pass a bill through Parliament to decrease child labor and regulate all factories to have a 10-hour work day. The transcripts from these investigations survive today as some of the best primary source evidence of child labor. Read the following accounts.

**Primary Source: Elizabeth Bentley, interviewed in 1832. (Del Sol)**

Question: What were your hours of labour?

Answer: As a child I worked from five in the morning till nine at night.

Question: What time was allowed for meals?

Answer: We were allowed forty minutes at noon.

Question: Had you any time to get breakfast, or drinking?

Answer: No, we got it as we could.

Question: Did you have time to eat it?

Answer: No; we were obliged to leave it or to take it home, and when we did not take it, the overlooker took it, and gave it to the pigs.

Question: Suppose you flagged a little, or were late, what would they do?

Answer: Strap us [whip with a strap or belt].

Question: What work did you do?

Answer: A weigher in the card-room.

Question: How long did you work there?

Answer: From half-past five [in the morning], till eight at night.

Question: What is the carding-room like?

Answer: Dusty. You cannot see each other for dust.

Question: Did working in the card-room affect your health?

Answer: Yes; it was so dusty, the dust got up my lungs, and the work was so hard. I got so bad in health, that when I pulled the baskets down, I pulled my bones out of their places.

Question: You are considerably deformed in your person in consequence of this labour?

Answer: Yes, I am.

Question: At what time did it come on?

Answer: I was about thirteen years old when it began coming, and it has got worse since. When my mother died I had to look after myself.

Question: Where are you now?

Answer: In the poor house.

Question: You are utterly incapable of working in the factories?

Answer: Yes

Question: You were willing to have worked as long as you were able, from your earliest age?

Answer: Yes.

Question: And you supported your widowed mother as long as you could?

Answer: Yes.

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What role, if any, do you think the government should take to regulate child labor?

Choose the answer that best represents your point of view:

1. The government should not intervene in the free market to regulate child labor. If parents do not want their children to work in factories, then they should not send them there. It is the responsibility of the parents to find a suitable living or working environment for their children. If the government regulates factory owners, it will increase the cost of doing business for all these new growing industries and decrease economic growth and jobs.
2. The government should establish a commission to investigate child labor in the new factories and mills. If there are unsafe conditions, it is the government's responsibility to look out for the safety of its children and set and enforce minimum safety standards. The government should also consider passing child labor laws that set a maximum number of hours that children should be allowed to work each day. The government should also consider investing in a public school system to educate its citizens.

# Public Health and Life Expectancy



A COURT FOR KING CHOLERA.

In the first half of the 19th century, urban overcrowding, poor diets, poor sanitation, and essentially medieval medical remedies all contributed to very poor public health for the majority of English people.

The densely packed and poorly constructed working-class neighborhoods contributed to the fast spread of disease. As we read in Engels' first hand account of working-class areas in Manchester, these neighborhoods were filthy, unplanned, and slipshod. Roads were muddy and lacked sidewalks. Houses were built touching each other, leaving no room for ventilation. Perhaps most importantly, homes lacked toilets and sewage systems, and as a result, drinking water sources, such as wells, were frequently contaminated with disease. Cholera, tuberculosis, typhus, typhoid, and influenza ravaged through new industrial towns, especially in poor working-class neighborhoods. In 1849, 10,000 people died of cholera in three months in London alone ("Public Health Timeline"). Tuberculosis claimed 60,000 to 70,000 lives in each decade of the 19th century (Robinson).

People who received medical treatment in the first half of the 19th century likely worsened under the care of trained doctors and untrained quacks. Doctors still used remedies popular during the Middle Ages, such as bloodletting and leeching. They concocted toxic potions of mercury, iron, or arsenic. They also encouraged heavy use of vomiting and laxatives, both of which severely dehydrated patients and could contribute to early death, especially among infants and children whose bodies would lose water dangerously fast (Robinson). Even though there were more doctors in the cities, life expectancy was much lower there than in the country.

Poor nutrition, disease, lack of sanitation, and harmful medical care in these urban areas had a devastating effect on the average life expectancy of British people in the first half of the 19th century. The Registrar General reported in 1841 that the average life expectancy in rural areas of England was 45 years of age but was only 37 in London and

an alarming 26 in Liverpool (Haley). These are life-long averages that highlight a very high infant mortality rate; in the first half of the 19th century, 25 to 33% of children in England died before their 5th birthday (Haley).

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What role, if any, do you think the government should take to improve public health in the new industrial cities? Choose the answer that best represents your point of view:

1. The government should not intervene in the free market to improve public health. Citizens are free to hire a doctor, go to a hospital, or seek their own medical remedies, as they have for centuries. Government has not been and should not be in the business of building houses for poor people. If the government were to provide free housing, medical care, and water, it would have to raise taxes enormously on businesses and citizens, which would hurt the economy a great deal.
2. For the benefit of the common good, the government should establish a commission to investigate public health in new industrial cities. The government should then set standards and regulations to ensure that drinking water is safe. It should start by making sure that cities have safe sewage systems that do not infect drinking water. This job is too large for members of the working class to fix on their own.



## Working conditions

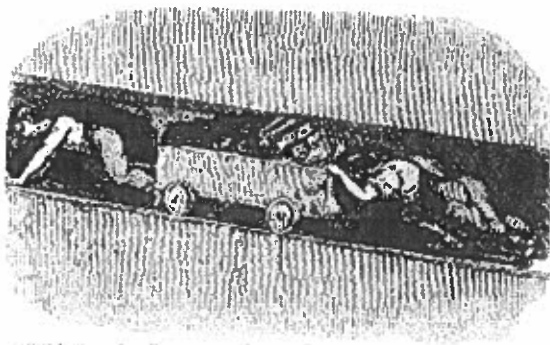


FACTORY WORKERS  
SOURCE: [HTTP://WWW.LEARNINGCURVE.GOV.UK](http://www.learningcurve.gov.uk)

What were the working conditions like during the Industrial Revolution? Well, for starters, the working class—who made up 80% of society—had little or no bargaining power with their new employers. Since population was increasing in Great Britain at the same time that landowners were enclosing common village lands, people from the countryside flocked to the towns and the new factories to get work. This resulted in a very high unemployment rate for workers in the first phases of the Industrial Revolution. Henry Mayhew, name his title or role, studied the London poor in 1823, and he observed that “there is barely sufficient work for the regular employment of half of our labourers, so that only 1,500,000 are fully and constantly employed, while 1,500,000 more are employed only half their time, and the remaining 1,500,000 wholly unemployed” (Thompson 250). As a result, the new factory owners could set the terms of work because there were far more unskilled laborers, who had few skills and would take any job, than there

were jobs for them. And since the textile industries were so new at the end of the 18th century, there were initially no laws to regulate them. Desperate for work, the migrants to the new industrial towns had no bargaining power to demand higher wages, fairer work hours, or better working conditions. Worse still, since only wealthy people in Great Britain were eligible to vote, workers could not use the democratic political system to fight for rights and reforms. In 1799 and 1800, the British Parliament passed the **Combination Acts**, which made it illegal for workers to unionize, or combine, as a group to ask for better working conditions.

Many of the unemployed or underemployed were skilled workers, such as hand weavers, whose talents and experience became useless because they could not compete with the efficiency of the new textile machines. In 1832, one observer saw how the skilled hand weavers had lost their way and were reduced to starvation. “It is truly lamentable to behold so many thousands of men who formerly earned 20 to 30 shillings per week, now compelled to live on 5, 4, or even less” (284).



For the first generation of workers—from the 1790s to the 1840s—working conditions were very tough, and sometimes tragic. Most laborers worked 10 to 14 hours a day, six days a week, with no paid vacation or holidays. Each industry had safety hazards too; the process of purifying iron, for example, demanded that workers toiled amidst temperatures as high as 130 degrees in the coolest part of the ironworks (Rosen 155). Under such dangerous conditions, accidents on the job occurred

regularly. A report commissioned by the British House of Commons in 1832 commented that "there are factories, no means few in number, nor confined to the smaller mills, in which serious accidents are continually occurring, and in which, notwithstanding, dangerous parts of the machinery are allowed to remain unfenced" (Sadler). The report added that workers were often "abandoned from the moment that an accident occurs; their wages are stopped, no medical attendance is provided, and whatever the extent of the injury, no compensation is afforded" (Sadler). As the Sadler report shows, injured workers would typically lose their jobs and also receive no financial compensation for their injury to pay for much needed health care.



Life in the factory was most challenging for the first generation of industrial workers who still remembered the slower and more flexible pace of country life. Factory employers demanded a complete change of pace and discipline from the village life. Workers could not wander over to chat with their neighbors or family as they would have done while working in the country. They could not return to the village during harvest time to help their families, unless they wanted to lose their jobs. Instead, they were no longer their own bosses; foremen and

overseers supervised a new working culture to insure that workers' actions were focused and efficient. A few workers were able to improve their lot by going into business for themselves or winning a job as a supervisor, But the majority saw very little social mobility.

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What role, if any, do you think the government should have taken to improve working conditions in the new industrial factories, mills, and coal mines? Choose the answer that best represents your point of view and record your response in your notes:

a. The government should not intervene in the free market to improve working conditions. Workers are not forced to work. They choose to take jobs in the factories and mills, and it is their responsibility to watch out for their own safety. They are free to decide what jobs are best for them. If the government regulates factory owners, it will increase the cost of doing business for all these new growing industries and decrease economic growth and jobs.

b. The government should establish a commission to investigate working conditions in the new factories and mills. If there are unsafe conditions, it is the government's responsibility to look out for the safety of its citizens and set minimum safety standards. The government should also consider passing a law setting ten hours as the maximum number of hours that workers should be allowed to work each day. The government should also repeal the Combination Acts, which prevented workers from organizing in unions.

## Working Class Families and The Role of Women

The Industrial Revolution completely transformed the role of the family. In traditional, agricultural society, families worked together as a unit of production, tending to fields, knitting sweaters, or tending to the fire. Women could parent and also play a role in producing food or goods needed for the household. Work and play time were flexible and interwoven. Industrialization changed all that. The same specialization of labor that occurred in factories occurred in the lives of working-class families, and this broke up the family economy. Work and home life became sharply separated. Men earned money for their families. Women took care of the home and saw their economic role decline. While many factory workers were initially women, most of them were young women who would quit working when they married. In stark contrast to the various changing tasks that a farmer performed in pre-industrial society, factory workers typically completed repetitive and monotonous tasks for 10 to 14 hours each day.



Industrial working-class families, though not working together, did serve an economic purpose of raising money to support each other. As we have seen, children often worked to earn some income for the family. In difficult circumstances, mothers struggled to make ends meet and keep the family out of the poorhouses. Jane Goode, a working-class mother, testified before the British Factory Commission in 1833. The history of her family shows the worries and stresses of a mother struggling to survive. Her life shows the unfortunately common death rate of infants. Jane Goode had twelve children,

but five died before the age of two:

I have had five children that have all worked at the factory. I have only one that works there now. She is sixteen. She works in the card-room. She minds the drawing-head. She gets 5 shillings 9 pence. She pays it all to me. She has worked there nine years. She has been at the drawing-head all the while. She got 2 shilling when she first went. She was just turned seven. . . . Mary did not work here [at the factory] long. She went in about fourteen or fifteen. She was married last summer. She is thirty next June. She went on working at Elliot and Mill's and other factories till she married. Anne was just turned seven; she worked here four years, then she went to Mr Elliot's, and worked there till she was married, two years ago. She is nineteen next June. John was not eight when he went in; he is now twenty-two. . . . I have had twelve children altogether. I thought you were asking only of those who worked at the mill. There were five that died before they were a quarter of a year old. . . . Mr Samuel Wilson (now dead) came to Derby to get my hand, and I engaged with him with my family. I did it to keep my children off the parish [welfare]. (Frader 87-88)

Betty Wardle, interviewed by the parliamentary commission on women in mines in 1842, illustrates the incredible challenges of being a mother and a worker in coal mines:

Q: Have you ever worked in a coal pit?

Wardle: Ay, I have worked in a pit since I was six years old

Q: Have you any children?

Wardle: Yes. I have had four children; two of them were born while I worked in the pits.

Q: Did you work in the pits while you were in the family way [pregnant]?

Wardle: Ay, to be sure. I had a child born in the pits, and I brought it up the pitshaft in my skirt. (Frader 88)

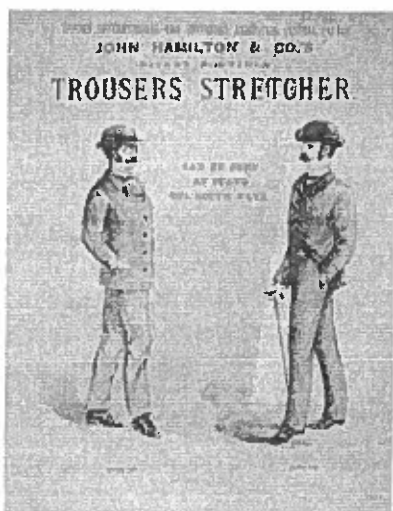
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What role, if any, do you think the government should take to improve the lives of working-class families? Choose the answer that best represents your point of view:

1. The government should not intervene in the private family life of its citizens.
2. The government was right to establish a commission to investigate the treatment of women and child in factories and mills. If there are unsafe conditions, it is the government's responsibility to look out for the safety of its citizens and set minimum safety standards. The government should also consider passing a law that creates a five-day work week, instead of six. The government should also consider investing in a public school system to educate its citizens.

## The Emerging Middle Class

Gradually, very gradually, a middle class, or “middling sort”, did emerge in industrial cities, mostly toward the end of the 19th century. Until then, there had been only two major classes in society: aristocrats born into their lives of wealth and privilege, and low-income commoners born in the working classes. However new urban industries gradually required more of what we call today “white collar” jobs, such as business people, shopkeepers, bank clerks, insurance agents, merchants, accountants, managers, doctors, lawyers, and teachers. [Middle-class people tended to have monthly or yearly salaries rather than hourly wages.] One piece of evidence of this emerging middle class was the rise of retail shops in England that increased from 300 in 1875 to 2,600 by 1890 (Ashton page #?). Another mark of distinction of the middle class was their ability to hire servants to cook and clean the house from time to time. Not surprisingly, from 1851 to 1871, the number of domestic servants increased from 900,000 to 1.4 million. (Ashton \*\*\* need to find page #) This is proof of a small but rising middle class that prided themselves on taking responsibility for themselves and their families. They viewed professional success as the result of a person’s energy, perseverance, and hard work.



In this new middle class, families became a sanctuary from stressful industrial life. Home remained separate from work and took on the role of emotional support, where women of the house created a moral and spiritual safe harbor away from the rough-and-tumble industrial world outside. Most middle-class adult women were discouraged from working outside the home. They could afford to send their children to school. As children became more of an economic burden, and better health care decreased infant mortality, middle-class women gave birth to fewer children.

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What role, if any, do you think the government should take to improve the lives of middle-class families? Choose the answer that best represents your point of view:

1. The government should not intervene in the private family lives of its citizens. The middle class is doing fine. Leave it alone.
2. The government should invest in a public school system to educate its citizens and encourage the continued rise of the middle class.

