## Does Arkwright Deserve the title "Father of the Factory System?"

In 1771 Arkwright began to build what would be the most successful factory in the world. This factory was called Cromford Mill. He decided to build his factory in the small Derbyshire town of Cromford. He made this choice because of the water supply which he had an idea for and because it was a quiet location which was not at risk from people stealing ideas. So it was sort of secretive. I addition Cromford has two excellent water supplies; these two water supplies are the drainage from the lead mines and the Bonsall brook. Arkwright chose to use the water supply from the lead mines because the Bonsall brook was unreliable because it froze in winter. Also the lead mines have a warm supply of water so this meant it was a reliable source of power and energy. The water supply was used by Arkwright creating a water wheel to power his new invention of the spinning frame. He designed the spinning frame in 1969 when he heard that there was a need for a machine that could make large amounts of yarn quickly. He son had the "spinning frame" patented and renamed it to the "water frame" after he decided to power the new invention with a water wheel. This useful source of energy was free and worked efficiently. The first factory was actually built in derby called the "silk mill".

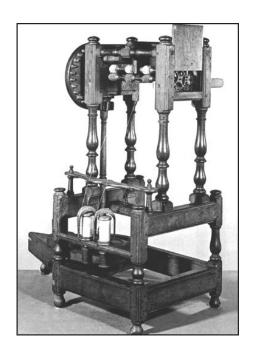
Arkwright's main drive to build the first factory was fuelled by his ambition to be successful. He also has a dream of a factory filled with yarn and workers walking around the clock. This was a new way of working and provided mass produced goods for the ever growing population. The growth in population is the main factor which caused the industrial revolution to break through, with the domestic system going out of fashion. Before the first factory was put in place, the domestic system was in place. The system consisted of people simple spinning and weaving in the home. This spinning was done with a simple spinning wheel in the home. The yarn produced would then be woven into cloth. The domestic system started to fail as the population rose. There was more demand for clothes because there were more people in England. This meant that simple hand or body powered machines were not quick enough to produce enough clothes for everyone. This is why people started to try and invent new,

quicker ways of producing clothes. The first person to have a go at inventing a quicker way of weaving was John Kaye in 1733. This promoted the textile industry to new heights. The demand for yarn how become so greatly increased that it became impossible to meet it merely by hand labour. A machine for making cotton had been introduced into Lancashire in 1760, and, in 1761, the society for the encouragement of Arts and Manufactories offered a prize of £50 for a successful spinning machine. Until 1767, spinning continued to be wholly by the old-fashioned spinning wheel. Later on in 1967 a man called James Hargreaves invented the spinning Jenny.



Hargreaves did not patent his machine until 1770, therefore many people decided to copy his machine without paying him any money. This was a big mistake to make.

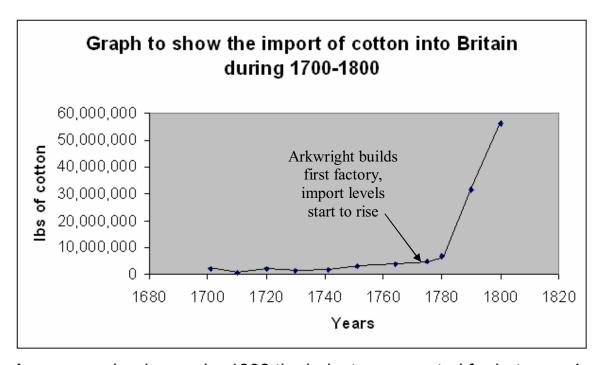
Richard Arkwright stole some of these ideas incidentally without having to pay for them because the spinning jenny was not patented. He used these ideas along with some of his own to make the Spinning Frame in 1969. He employed John Kaye to help him with his invention, who in fact brought along many more ideas that helped to build the spinning frame.



This was a year before Hargreaves patented his work so it was legal for Arkwright to steel some ideas free of charge. The machine was too big to be placed in the home so he built the purpose built factory in Cromford. He renamed the spinning frame the "water frame" after he powered it with the water from the local mines. The machine was far better than the previous machines in that it produced much stronger yarn at a much quicker rate, and now could be powered by water which was much cheaper than employing people. The employed people at Arkwright's factory simply watched the machines to make sure things didn't go wrong and tied up ends that had broken. His now reality of these machines lined up along the walls of the factory fitted with his vision of "rivers of yarn". The factory was a simple block shaped factory in which he employed many workers from the local area of Cromford. He advertised for these workers to work for him by including special bonuses that other employers never gave out. For example he built housing for the workers in which they were aloud to live in. This housing was very near to the factory so that they could not be late and didn't have to find money for transport. He paid his workers very well and never treated them badly. He did put fines in order which meant that workers had to concentrate at all time unless they wanted some of their wages deducted. This just gave more of an organized factory for Arkwright and meant that he could make as maximum yarn as possible.

The amount of cotton now being imported to Britain was more than ever. It had increased so much just because of Arkwright needing it to turn into yarn.

Here is a graph to show the amount of Cotton being imported into Britain over the 100 years between 1700-1800.



As we can clearly see, by 1802 the industry accounted for between 4 and 5 percent of the national income of Britain. Production had grown to 8 percent and had now overtaken the woolen industry. By 1812 there were 100,000 spinners and 250,000 weavers. By 1830 more than half the value of British home-produced exports consisted of cotton textiles.

In 1751, Britain's export of cotton goods was valued at £46,000. By 1800 this had raised to £5,400,000 and by 1861 a massive £46,800,000. This is more than a thousand fold increase in value. Judged by the numbers employed, the Arkwright Empire was the largest in the country. By 1782, he estimated his workforce at over 5,000.

Arkwright decided he wanted to build more mills in other places and extend his empire from just being situated in Cromford. He established more mills in Derbyshire, Yorkshire, Worcestershire and Manchester. He began to expand throughout the country. He also

opened a mill in Scotland after a visit took him to Lanark to see the falls of Clyde. Here he realized their great potential as a source of water power.

Arkwright was a very important man to the country, especially when the war broke out. Arkwright exported so much cotton that GB remained economically successful despite being in engaged in the French Wars and the U.S war of Independence. Arkwright not only developed the small town of Cromford into one of the most successful and famous villages in the world, he turned the textile industry into a savior of our country throughout the war. Without Arkwright's contributions the textile revolution might never have developed into the mill-based industry that played such a central role in the Industrial Revolution. He is undoubtedly and inspiration figure of the eighteenth century that will never be forgotten.

Sir Richard Arkwright, who was knighted for his achievements in the cotton industry in 1786 by George the third, deserves the title of "Father of the Factory System" more than anyone in the world due to his success he made in the textile industry. If people still remember you 273 years later from when you were first born, I believe that this makes you a very special and important person. Arkwright will never be forgotten for the achievements that people still appreciate today.