The causes of the industrial revolution 1750-1850

History, Revolution

Nobody really knows exactly when the industrial revolution happened or what caused it, although it was roughly from 1750-1850 and was caused by many things, which are all linked in different ways. Each of these causes triggered a chain reaction of ideas, inventions and machines, all of which contributed to the industrial revolution. There are lots of causes and even today historians can’t work out all the reasons why it happened. Therefore this essay will not talk about all of the aspects.

It will talk about population growth, factories, agricultural improvements, inventions and inventors, key figures in the industrial revolution, transport improvements and the expansion of trade. Population growth played a key role in helping the industrial revolution to happen. It created demand for new products which tempted many people to open factories. Also, before the 1700s most people lived in the country away from the cities with their own plot of land to grow food on.

However by the 1800s when the industrial revolution was well underway, the population had tripled, due to agricultural improvements and the fact that there had been no epidemics or outbreaks of diseases, such as the plague. This meant that there was not enough space in the country for each family to have it’s own plot of land and that people had to work for other people to earn a living. There was very little choice of employment and most people had to work in “ Factories. ” Factories were one of the key elements of the industrial revolution.

Instead of individual families working from home (which required skills) factories started employing large numbers of unskilled people to work there.

This meant that the producers of goods, the factory owners, employed people to work on recently invented machines, on a very large scale. This gave the victims of the ever growing population, who were starving on the streets, a means to earn some money. In the factories people would usually work very long hours for very little pay, but they had no other choice. They could not complain, because there were so many people waiting for a job that they were easily replaced.

This continued to increase the margin between rich and poor as the rich not only had far more money but they also had the power as they could get rid of their workers at any time. Abraham Darby was a key figure in the production of iron. He worked out that the most expensive item in the production of iron from iron ore was charcoal (slightly burnt wood that was used in blast furnaces). He then tried to work out a cheaper way of producing iron and came up with the idea of using coal. If coal could be used instead of charcoal to heat the iron then he would save vast amounts of money.

Coal didn’t work, because the sulphur in it ruined the iron, so he tried coke (Coal without sulphur), which was perfect and his iron pots were much cheaper than everyone else’s and he made a lot of money. Agricultural improvements were another significant factor in the industrial revolution. The main agricultural improvements were caused by a new four year cycle, in which they grew food, and then grew plants, for the animals to eat and the animal’s manure enriched the soil. New machinery meant that fewer workers were needed on farms so more people went to work at factories and the new

methods of farming meant that there was enough food for the growing population, which led to a drop in the death rate and a rise in the birth rate.

There was also more meat available because, for the first time, careful select breeding was used to make fatter and fatter animals. The population grew and there were more people to work in the factories. The other main point was that as farmers grew more, they earned more and had spare money, which they could invest into new businesses and inventions. This was very tempting, because they could make a lot of money, and many decided to do so.

This was extremely good for the inventors who, once they had come up with an idea, needed capital to spend on making the invention and testing it. The inventions ranged from small to big, from Kay’s Flying shuttle to the atmospheric steam engine. Kay’s Flying Shuttle allowed weavers to weave more quickly and made big sheets of cloth. Many other inventions were built off of this and they were just as successful. Some of these were Harigrave’s spinning Jenny (a device which spun 8 cloths at once, when one handle was spun), Arkright’s Water Frame (a water powered spinning machine that produced good quality thread), Cromptan’s Mule (it spun good quality thread that was of a finer standard of Indian cloth for the first time ever) and Cartwright’s Power thread (this allowed cotton Thread to be woven in factories for the first time).

One of the most important inventions during the industrial revolution was the atmospheric steam engine, invented by Thomas Newcomen, which was used to pump water out of deep tin and coal mines. It was also used as an

alternative to a water wheel in factories where it was used by factories such as cotton mills to power looms and other machinery. It was more reliable than water wheels as it was not reliant on the strength of the flow of the river or the tide tables. The fact that it did not rely on anything except a steady supply of coal meant that it could be used almost anywhere, not just by rivers. This meant that the factory could be built closer to any raw materials needed or closer to the point of demand for the product (therefore lowering the price of transport).

Other inventors built on the same ideas but in a different way and eventually came up with the Railway Engine. The railway engine was a vital invention in the industrial revolution. It caused improvements in transport in every area, from rivers to roads. This was because it meant that people could travel further, faster and cheaper by boat and by train to all of England, and, in the boat’s case, even to places like The Americas and other ex colonies.

This also helped trade as it meant that people could send their goods further away, for a much cheaper cost and create a much bigger market. This was called expansion of trade and it meant that new inventions and goods could be sent to further away and this caused businessmen to make more money, which in turn could be invested back into their businesses. This caused many new inventions, which in turn improved the quality of goods. In my opinion all of these factors were very important in causing and giving momentum to the industrial revolution and many more factors also contributed to it.

They were all interlinked and connected and I believe that the most important factor in the industrial revolution was the individuals that invented

new machines. This is because had it not been for those inventions, there would have been no agricultural improvement, which would mean no population growth, which would mean no workers or machines in factories, which would mean no new products or demand, and the industrial revolution would have never happened.