

James Hargreaves (1720 - 1778)

Hargreaves was an illiterate carpenter and weaver. He invented a machine called the 'spinning jenny', which could spin several threads of cotton at once.

James Hargreaves was born in Oswaldtwistle, near Blackburn. He received no formal education and was never taught how to read or write. He was poor and had a large family. He moved to Stanhill in Lancashire, North of England, looking for work and raised a family there, working as a spinner and carpenter.



Hargreaves spent some time considering how to improve the process. It is claimed that one day his daughter Jenny, accidentally knocked over the family spinning wheel. As Hargreaves watched the overturned machine, he noticed that the spindle continued to spin as normal with the spindle now pointed upright, even though it had now been turned over by the fall. Hargreaves realized there was no particular reason the spindles had to be horizontal, as they always had been, and he could place them vertically in a row and it gave Hargreaves the idea that a whole line of spindles could be worked off one wheel. By turning a single wheel, the operator could now spin eight threads at once. Later, improvements were made that enabled the number to be increased to eighty. In 1764 Hargreaves built what became known as the Spinning-Jenny. The spinning jenny was the first machine that accurately simulated the drafting motion of human fingers. Hargreaves kept the machine secret for some time, but produced a number for his own growing industry. The price of yarn fell, angering the large spinning community in Blackburn. This made him unpopular with other spinners, who thought they might lose their jobs. Eventually they marched on his house and smashed his machines. The attackers were workers fearing being unemployed by the Spinning-Jenny, forcing him to flee to Nottingham in 1767. There he set up shop producing jennies in secret.

Hargreaves did not apply for a patent for his Spinning Jenny until 1770 and therefore others copied his ideas without paying him any money. Although the thread that the machine produced was coarse and lacked strength, still it was so effective in increasing the efforts of a worker's labor that Karl Marx cited it as the cause behind the elimination of slavery.

It is estimated that by the time James Hargreaves died poor in 1778, over 20,000 Spinning-Jenny machines were being used in Britain.