

sewing began when people used a pointed tool that had a hole (eye) in one end, known as a sewing needle. For thousands of years, until the invention of the sewing machine, people sewed everything by hand, stitch by stitch. Even after weaving had been invented, one shirt could take more than half a day to sew together by hand. Women and girls spent hours sewing. Working in bad conditions for low pay in crowded factories, men, women, and children sewed clothes, shoes, and other items.

The **sewing machine** led to the mass production of clothes. Elias Howe built the first successful sewing machine, patented in 1846, but the earliest sewing machines were for industrial use in factories. Improving on Howe's design, Isaac Singer developed the first home machine. Singer used traveling sellers and let people pay on installment (paying a set amount of money over a period of time). This increased sales of home sewing machines. Sewing machines save time and labor. They produce

production of clothing, shirts took only about an hour to sew, instead of half a day. Now many sewing machines are computerized.

Throughout history, people have washed clothes in streams or tubs, often with a dolly (rod or paddle) to swish the clothes. In 1858, Hamilton Smith invented a **washing machine** that was a vertical drum with a hand-cranked dolly. In 1863, he added a reverse gear.

In 1907, Alva Fisher invented the first **electric washing machine**. It had a motor that moved a dolly. In 1924, a New York company (Savage Arms) invented the washer with a spin dryer, but it was difficult to operate because the user had to lift the drum, full of wet (heavy) clothes, and place it in another container to spin dry. In the 1950s, twin-tub machines were invented. This was the beginning of the washers and dryers used today.

**Exercise:**

1. How did sewing machines change people's lives? \_\_\_\_\_  
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2. How did the first mechanical washing machine work? \_\_\_\_\_  
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3. How did the electric washing machine work? \_\_\_\_\_  
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4. How did all these inventions improve people's lives? \_\_\_\_\_  
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