

The Fours of the Industrial Revolution

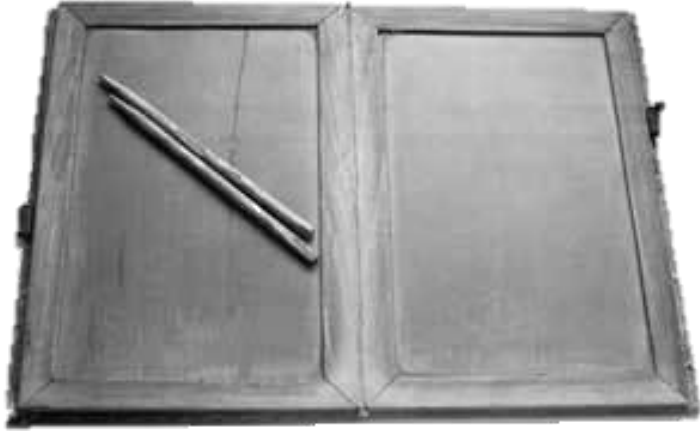
By Mackenzie Ellis-Phillips

# The four most important aspects of education for children in Victorian Britain



Students

School was not compulsory in Victorian England. Many children whose families were poor went to work to help support their family. School was only for kids who came from rich families as it was quite expensive. Usually, rich boys and girls were taught at home by a governess. When boys turned ten, they often went to a school to continue their education. Girls however stayed at home to continue to be taught by a governess, unless they were extremely rich, then they might go to boarding school. In 1844, the union of ragged schools was formed. Ragged schools were volunteer led schools that taught a trade like shoemaking and domestic skills. Students of ragged schools were usually poor kids who might have parents who were dead, in prison, abusive or alcoholics. Ragged schools provided food and clothes to its students. By the 1860s more than 40,000 poor children went to ragged schools. The Education Acts in the 1870s made school compulsory for all children. The Elementary Act introduced by William Edward Forster of 1870 increased grants for schools allowing more students to attend school. In 1893 the leaving age for school was eleven, it was later changed to thirteen.



# Supplies

In Victorian England, school supplies were a lot different than what we use today. Only older students used paper as it was expensive. When they first started school as a young pupil, they practiced writing using sand trays. Slightly older students would use slate and slate pencils as writing could be easily scratched in and just as easily removed. Because you couldn't save the slate, a teacher would check your work before erasing it. As mentioned before, the oldest pupils used paper books and dip pens. They used black ink from inkwells in their desks. "Ink monitors" filled inkwells every morning for the entire class. Teachers used blackboards and chalk for their lessons. The classrooms usually had an abacus which like a calculator, is used to calculate sums quickly. Often classes also had a globe.

# Lessons and Building

THE ALPHABET.

| <i>Script.</i> | <i>Roman.</i> | <i>Script.</i> | <i>Roman.</i> |
|----------------|---------------|----------------|---------------|
| <i>A</i>       | <i>a</i>      | <i>N</i>       | <i>n</i>      |
| <i>B</i>       | <i>b</i>      | <i>O</i>       | <i>o</i>      |
| <i>C</i>       | <i>c</i>      | <i>P</i>       | <i>p</i>      |
| <i>D</i>       | <i>d</i>      | <i>Q</i>       | <i>q</i>      |
| <i>E</i>       | <i>e</i>      | <i>R</i>       | <i>r</i>      |
| <i>F</i>       | <i>f</i>      | <i>S</i>       | <i>s</i>      |
| <i>G</i>       | <i>g</i>      | <i>T</i>       | <i>t</i>      |
| <i>H</i>       | <i>h</i>      | <i>U</i>       | <i>u</i>      |
| <i>I</i>       | <i>i</i>      | <i>V</i>       | <i>v</i>      |
| <i>J</i>       | <i>j</i>      | <i>W</i>       | <i>w</i>      |
| <i>K</i>       | <i>k</i>      | <i>X</i>       | <i>x</i>      |
| <i>L</i>       | <i>l</i>      | <i>Y</i>       | <i>y</i>      |
| <i>M</i>       | <i>m</i>      | <i>Z</i>       | <i>z</i>      |



There were a few different types of schools. Ragged schools as mentioned before were volunteer led for poor kids. Dame schools were small private schools for young children. They taught the alphabet, some reading, mostly from the New Testament, and chores. Teachers tended to be illiterate and it mostly just turned into babysitting. Girls schools taught “things to earn a husband”. This includes sewing, needle work, drawing, and music. There was a lot of repeating and memorizing and very little to no creativity. Boys schools taught them academic and functional skills. They taught the boys how to be gentlemen. Things like sportsmanship, religion, leadership and confidence. They were taught academics too. The three Rs of reading, writing, and arithmetic, as well as map drawing, geography, and history. Gym was called ‘drill’ and for it the pupils, ran, jumped, stretched, and lifted weights. The school might have a special room for science and cooking. Students were punished in school a lot. You could be punished for disrespecting the teacher, failing to complete work, using your left hand, being late, skipping class and many more. The punishments were painful or humiliating. Some include wearing a dunce cap and sitting in the corner, being hit with a cane, thrown into cold water, hit with a ruler or repeating writing lines with no mistakes. Model students were sometimes given awards and prizes. The most esteemed award was the Queen Victoria Medal for outstanding attendance. The actual school building was very cold and drab with no decorations and windows high up to prevent distractions. Students sat at iron-framed or wooden desks usually in rows, facing the blackboard.





Teachers



Teachers demanded great respect from their students. Students had to bow or curtsy during registration (attendance). They were usually very serious and even mean. Many teachers were not qualified as they had not gone through training, but it didn't matter. Teaching was a kind of learn as you go job. Teachers were usually women and went by miss or madam. It was rare that men taught because the pay was so low but if they did, they went by sir. It wasn't until 1846 that the government started to help pay for teacher training. However it was not mandatory. Head teachers had to keep recordings of who was at school and what was taught. The head teachers were the ones responsible for the pupils under their care. In 1870, it was decided that head teachers had to be qualified for the job. "Pupil teachers" were older pupils who helped to teach the younger pupils.

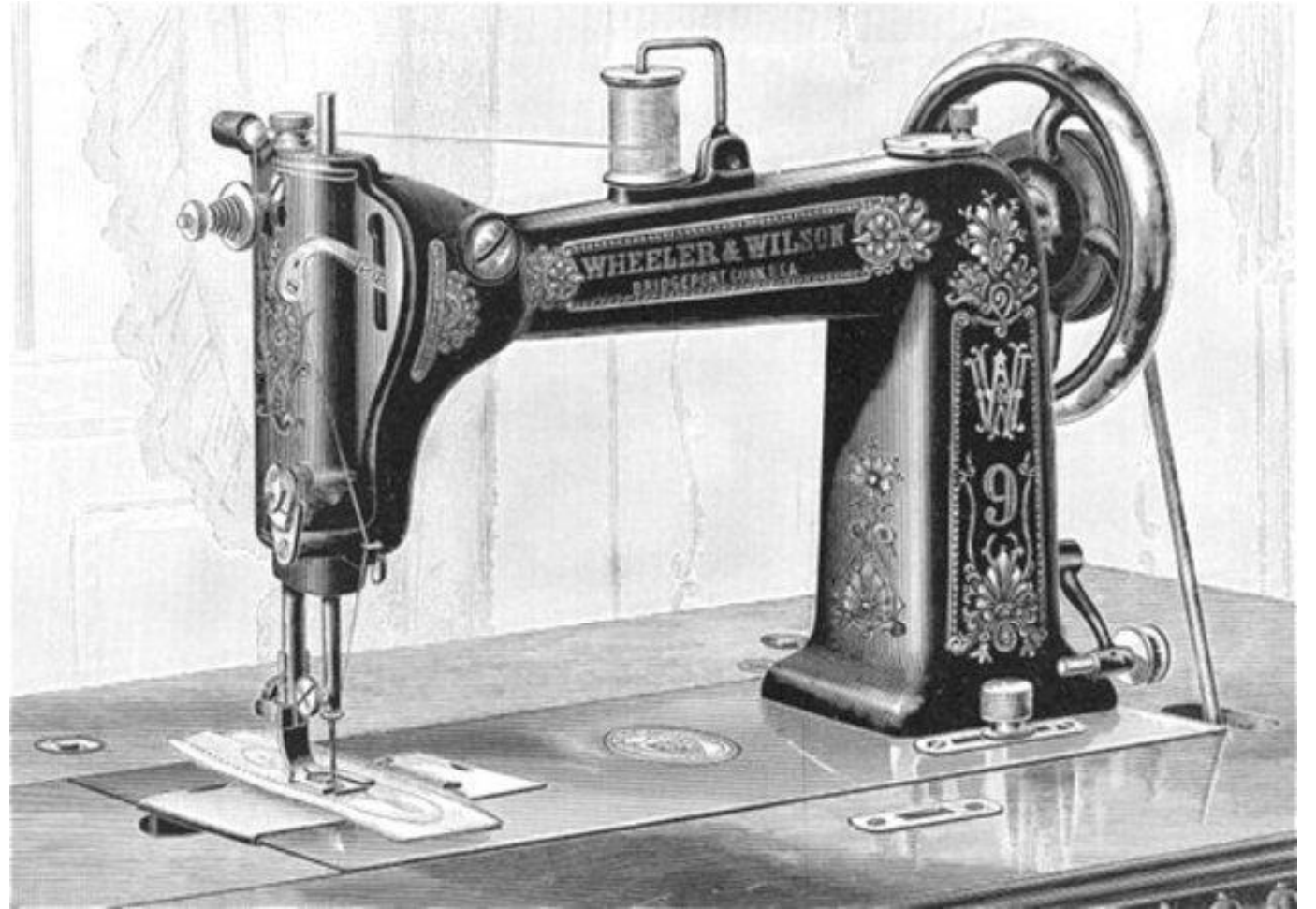
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# Sewing Machine

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Solution Fluency Assignment

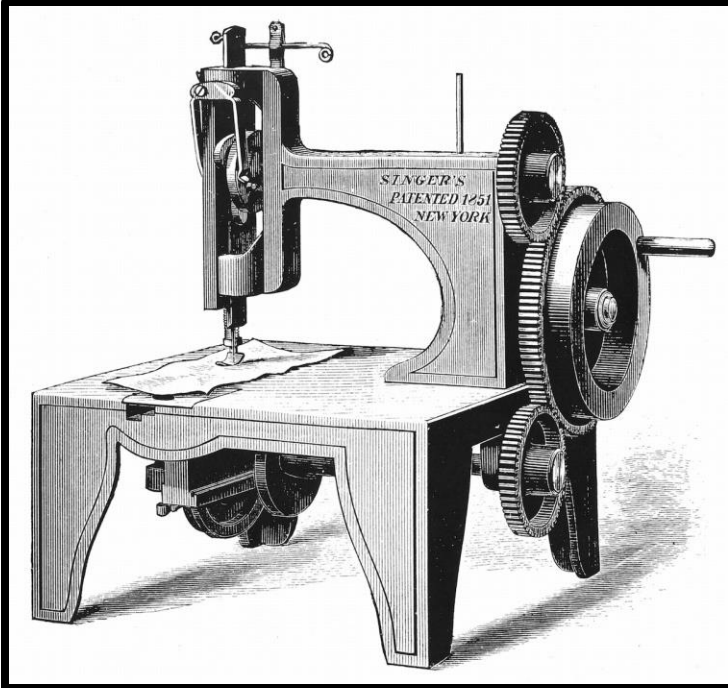


# Purpose of innovation



In 1790 Thomas Saint invented a sewing machine however the machine never made it past the patent model stage. The first practical machine was built by Barthélemy Thimonnier in 1829. Thimonnier created a small factory of his machines but Paris tailors feared for their jobs and burned down the factory, almost killing Thimonnier. Thimonnier died a poor man because of this. Walter Hunt, Elias Howe, Isaac Singer and Allen Benjamin all made their own sewing machines, and all fought each other for the patent. All these inventors had the same idea in mind, to create a machine to speed up sewing time and make it easier.

# Problem



The first sewing machines all had problems, they were very not practical, and people were worried about losing their jobs because of them. The first machine was powered by a hand crank which meant sewers could only use one hand when directing the fabric through the machine. They also could only do one type of stitching, which meant if you wanted to do another stitch, you needed a new machine. Sewing machines were invented to help people sew but unfortunately, some people didn't see it like that. French tailors burned down Barthelemy Thimonnier's factory and other people who sewed for a living just didn't like them because they cut down their work.

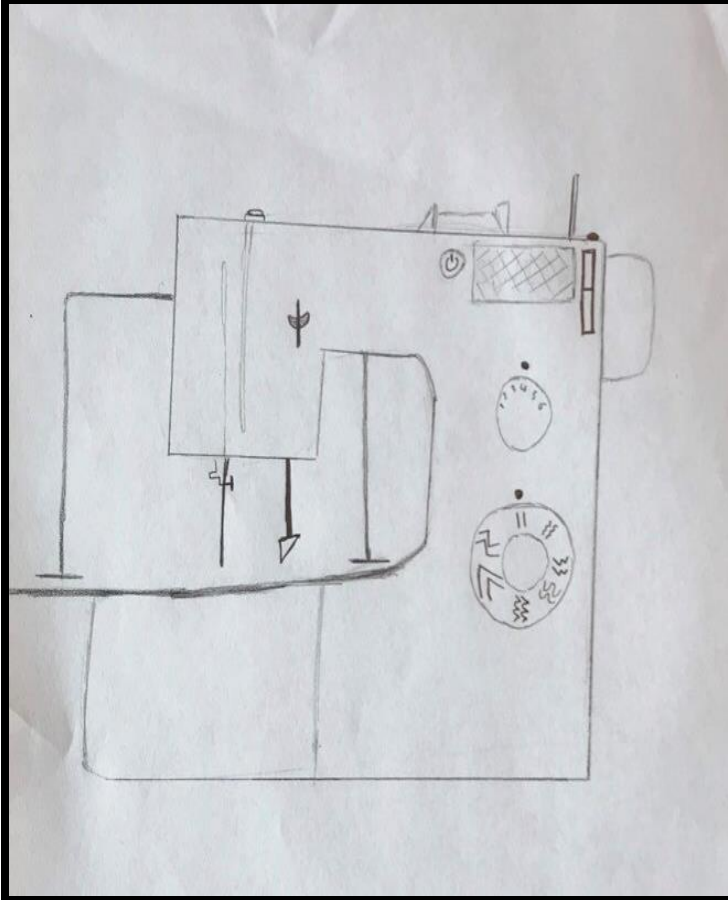
# Solution



Today, we have fixed the problems the old sewing machines had. Instead of a hand crank all sewing machines today have an electric motor connected to a foot pedal so you can use both hands to hold and direct the fabric which means you have more control. Modern machines can also do different types of stitching to suit every project. Now, people have realized the faster you sew the more work you can do and have opened their own sewing shops. In addition, people now have sewing machines in their houses which can save them money if they do their own repairs or make their own clothes.



# In 50 years



In fifty years, sewing machines could be programmable. There could be apps to download onto your phone that you put instructions in and put the fabric on the machine and off it goes, sewing while you relax. There would be a sort of table with a conveyor belt type thing to move the fabric and of course if you wanted to sew there would be a little switch to change from manual to auto. In the future there might be robots to buy in stores that do everything for you so sewing machines might be obsolete but who knows, maybe they'll be around for the long run.

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