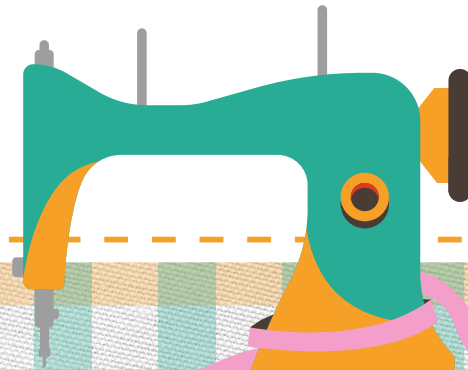


THE SEWING MACHINE

Presented by dania



WHAT IS A SEWING MACHINE?

THREAD GUIDE

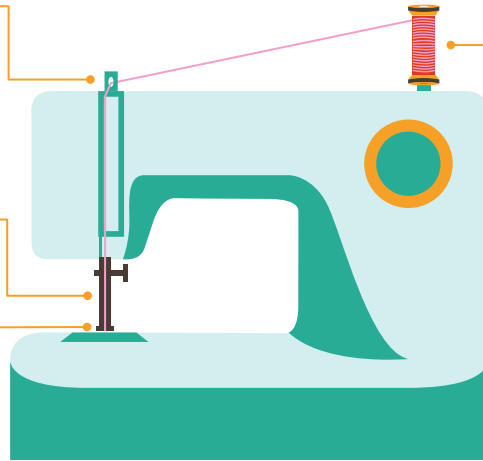
To ensure thread does not get tangled

NEEDLE

Double sided needle - eye at the bottom

PRESSER FOOT

Moves the cloth along



BOBBIN WINDER

Holds the thread spool

HANDWHEEL

Can be used to manually move the needle

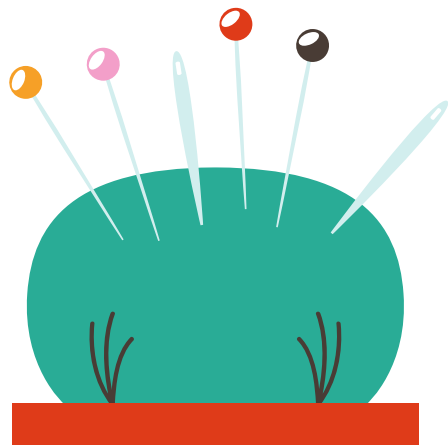
PATTERN WHEEL

To choose the type of stitch and the tension needed

00

HOW SEWING WORKS

and why it was so hard to make a sewing machine



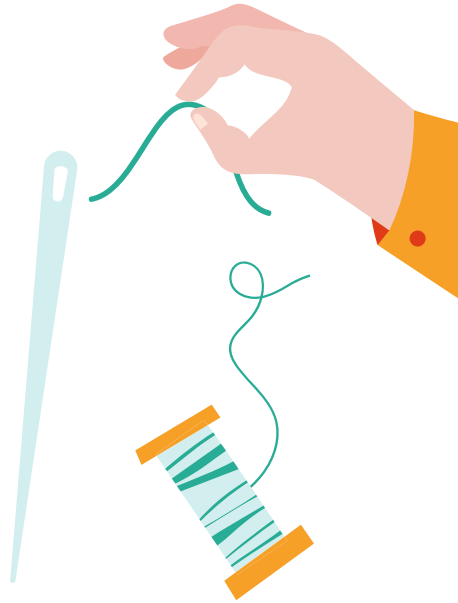
HOW SEWING WORKS

NEEDLE

Needle has to be threaded, the hole for the needle is at the top and the needle thins towards the sharp bottom

TIME

It took at least 12 hours to cut and sew the patterns a singular piece of clothing!



SEWING

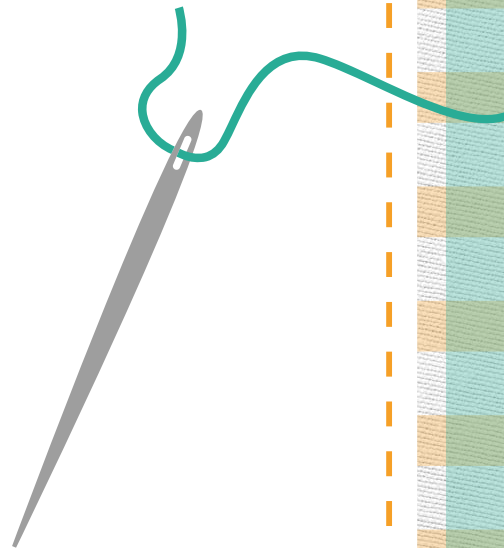
The process of sewing required the needle to be passed through the fabric, and then back up again. This meant that the needle had to be let go, then flipped so that the sharp side points towards the fabric

Step

01

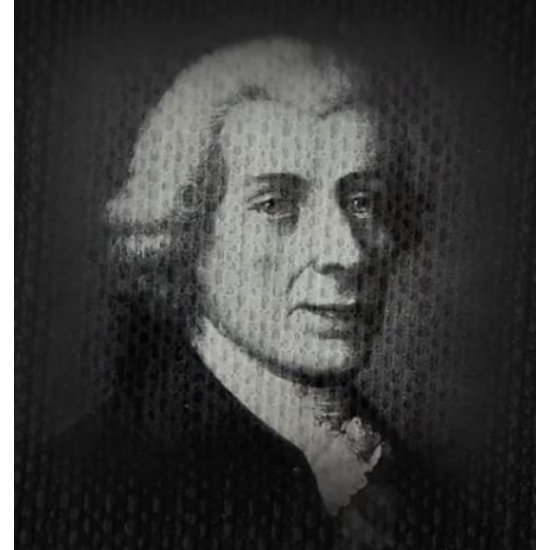
THE DOUBLE SIDED NEEDLE

The invention that made it possible



CHARLES FREDRICK WIESENTHAL

- He was a German physician and inventor
- He invented the double point needle in 1755
- He received the British Patent No. 701 in 1755
- Some people argue that he invented the first sewing machine but there is no clear evidence of that



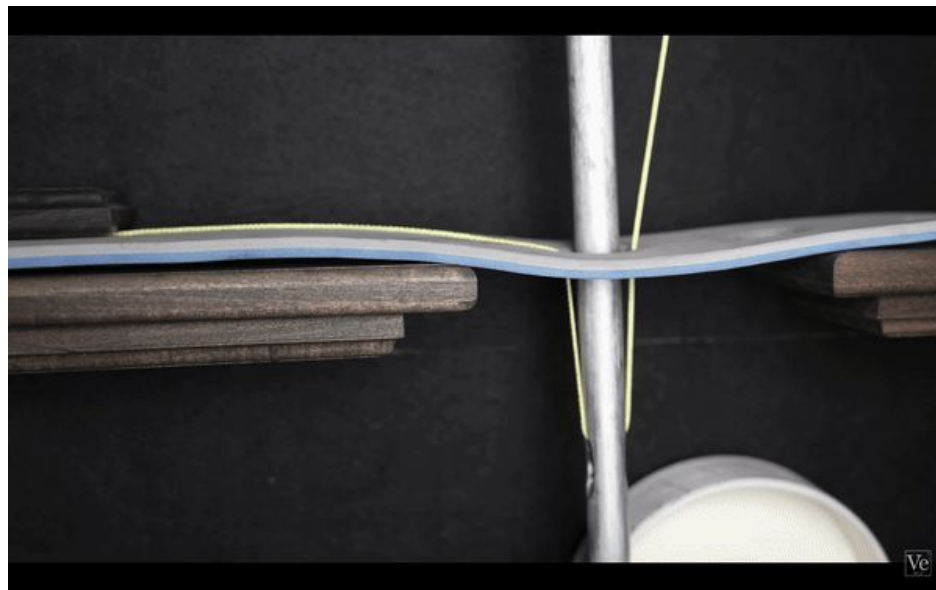
02

THE HOOK

The invention of the first sewing machine

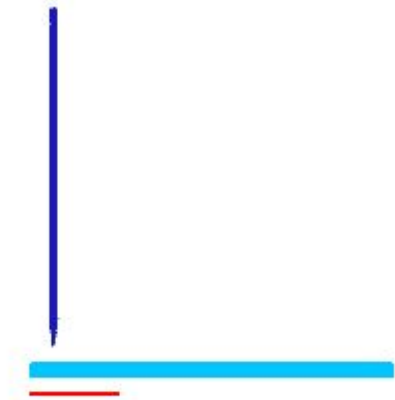


THE CHAIN STITCH



BARTHÉLEMY THIMONNIER

- He was a french inventor
- He (kind of) invented the first sewing machine in 1829
- His machine used a barbed needle to create a chain stitch
- He made 80 sewing machines that were used to create the uniforms for the french army



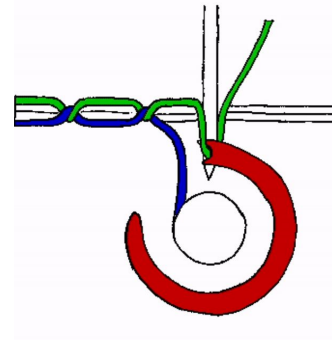
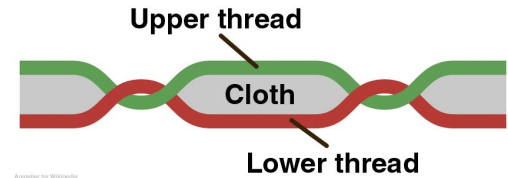
JAMES GIBBS & CHARLES RAYMOND

- James Gibbs and Charles Raymond both invented their own versions of the “hook” around the same time around the 1860s
- These hooks allowed the commercialisation of sewing machines

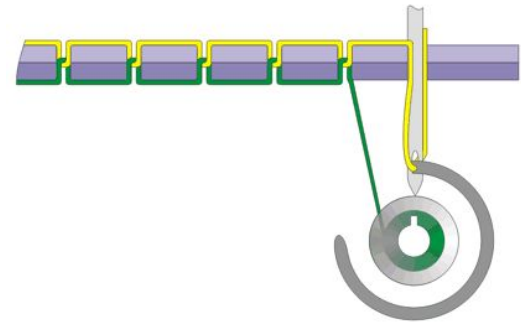
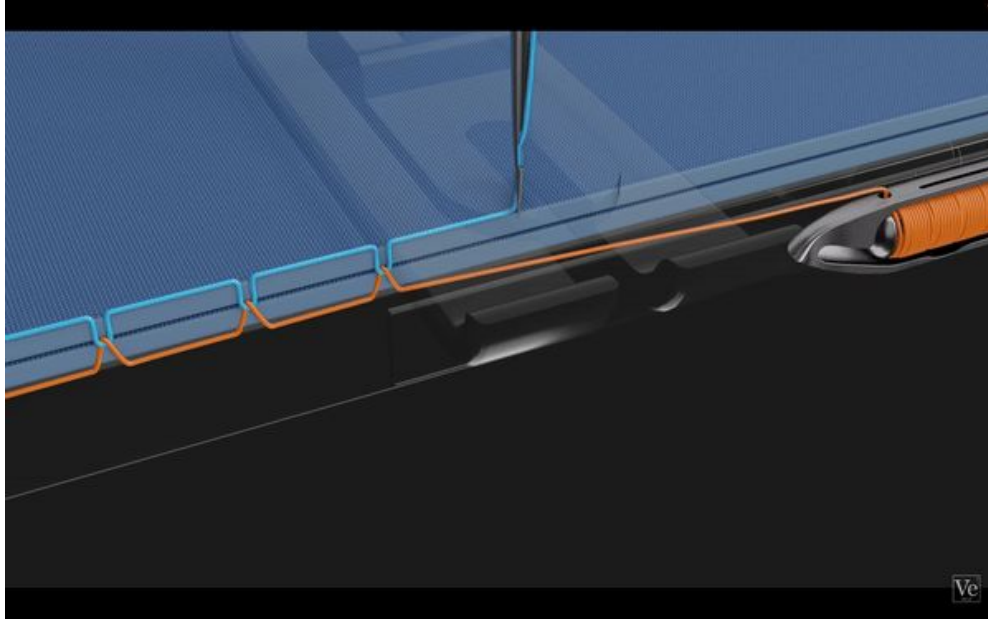


THE LOCK STITCH

- The lock-stitch is the most common stitch used in sewing machines up to this day.
- It was patent by Elias Howe in 1846. However his machine could only sew in a straight line.
- In 1850, Allen B. Wilson created a sewing machine that used an oscillating shuttle to create a lock-stitch
- In 1851, he created a rotating mechanism to create this stitch and this mechanism is still used in today's sewing machines



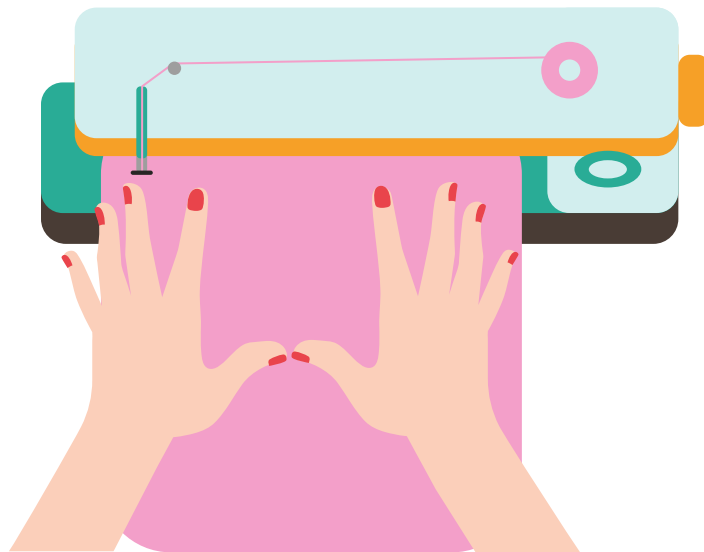
THE LOCK STITCH



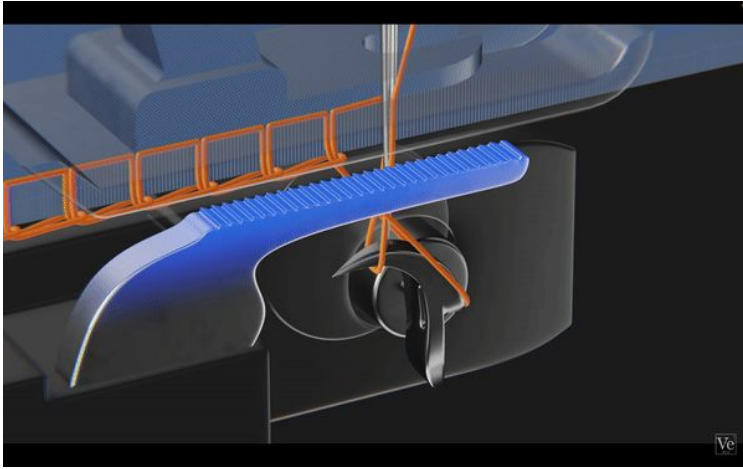
03

THE FEED-DOG

Completing the sewing machine



THE FEED DOG



- Prior to the invention of the feed-dog, the fabric was moved manually after each stitch
- Allen B.Wilson created the most successful mechanism for the feed-dog in 1953
- This mechanism had a foot with grooves on it that would move the fabric half an inch with every rotation
- The grooves would hold onto the fabric to move it



04

THE FUTURE OF SEWING MACHINES

What they look like today and how they might look in the future

FUNCTIONALITY OF SIMPLE SEWING MACHINE



STRAIGHT STITCH



ZIG-ZAG STITCH



OVERLOCK STITCH



BLIND-HEM STITCH



BLANKET STITCH

WIKIMEDIA COMMONS: USER:KIMBERLY B. THOMAS/PHOTO

EMBROIDERY MACHINES



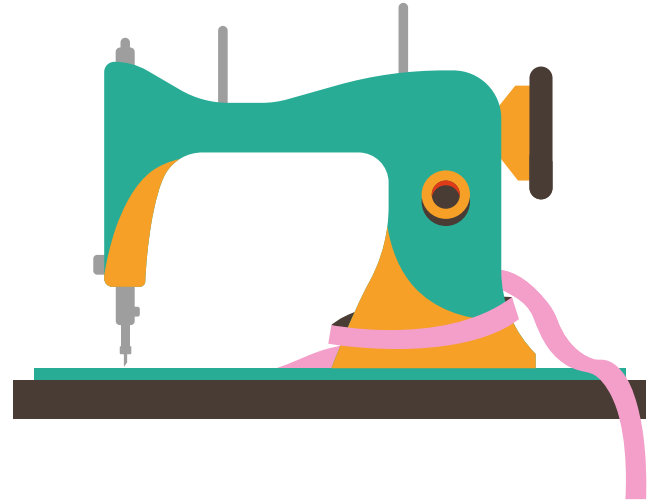
THINGS THAT CAN NOT BE DONE BY MACHINES



05

ETHICAL ISSUES

Fast-fashion and exploitation



SWEATSHOPS

- Children, Women and Men in less developed countries are exploited and are paid less than minimum wage
- They work more than 18 hours a day in inhumane conditions with no management



CLOTHING WASTE

- More than 100 Billion garments are produced every year
- Around 11.3 Million tons of clothing are sent to landfills every year
- This is due to the fast fashion industry and cheap clothings





Thank you!

Do you have any questions?