HM_L3TS

Processes in Sutton and Mansfield's historic cotton mills

Mill Waters
Parks and Reservoir

well read
informed communications

This education Pack developed by Kate Dawson at Well Read in consultation with local heritage groups and schools. Particular thanks to Denis Hill, Heritage Consultant for his help providing historic background.

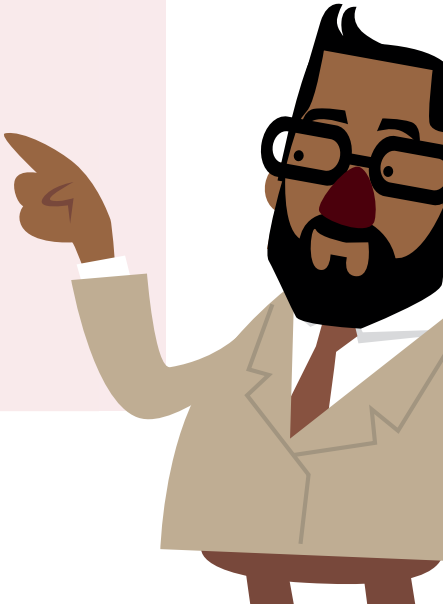
at Mill Waters heritage site

The fashion for stockings

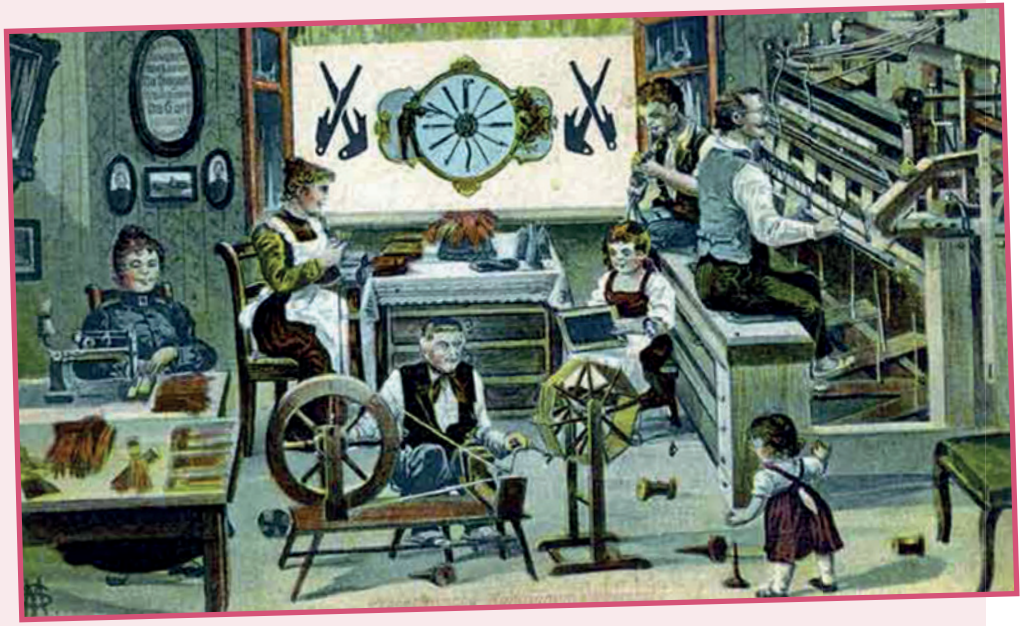
In the 1700s it was fashionable for men to wear stockings with breeches (knee-length trousers).

Noblemen wore stockings of silk, often in bright colours, whilst commoners wore plain wool stockings.

The embroidery on the ankle of stockings was known as the ‘clock’.



How were stockings made?

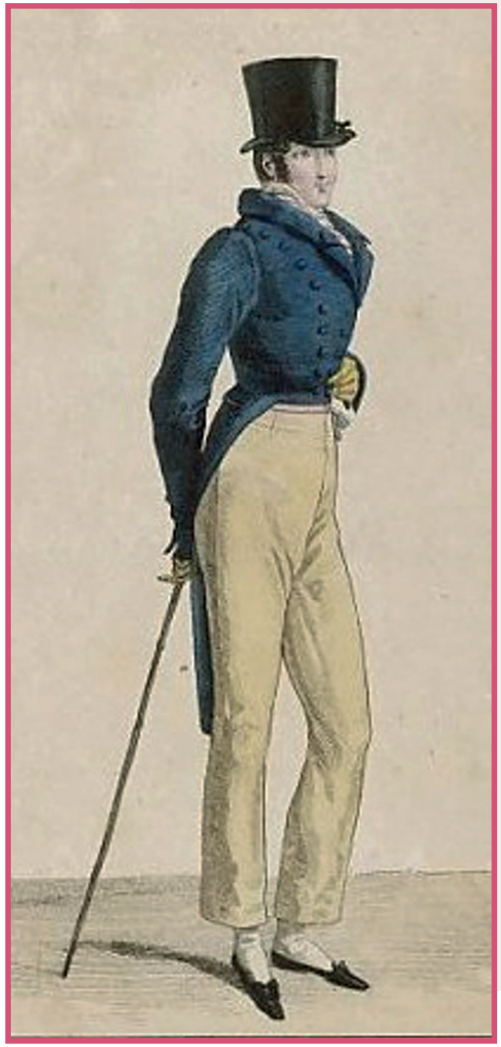


Stockings were knitted in people's homes on knitting machines, or stocking frames. Everyone in the family worked: the children and women spun the yarn and the men knitted. The women then sewed up stockings and did any fancy embroidery.

When new machinery was invented that could speed up textiles production in the early 1800s, the stockingers could not compete and they started to lose work.

Cut up stockings

What did the cotton mills produce?

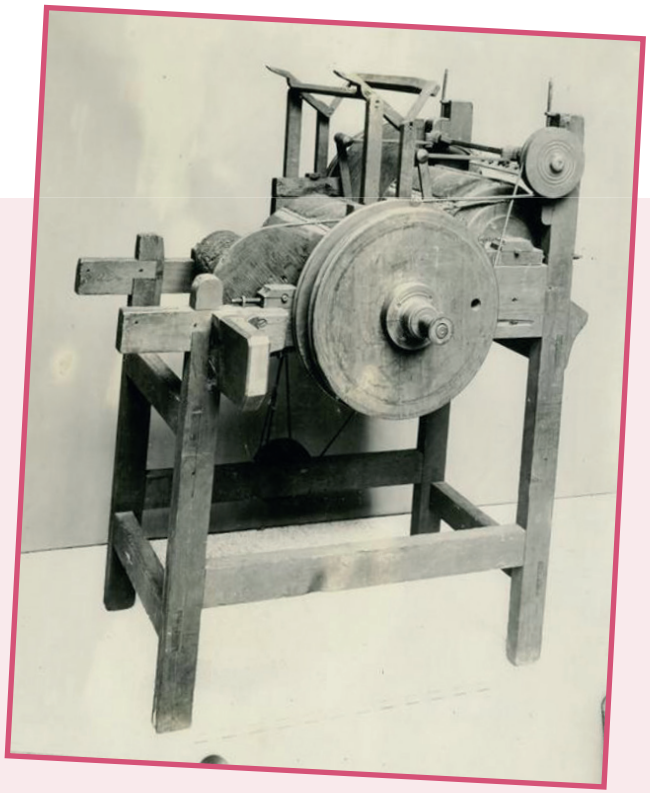


Sutton Mill (Unwin's Mill) produced nankeen – a durable yellowish cotton fabric, often used for men's trousers.

By the middle of the 19th century Unwin's had responded to the trend for cotton gingham, although in those days it would have been a stripe design rather than the check gingham which is more popular today.

Carding

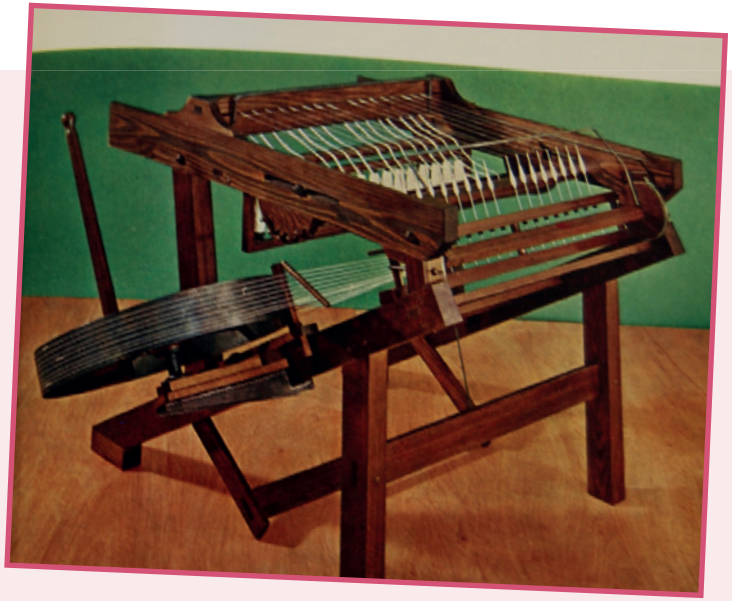
Before mechanical carding, untangling the fibres from a cotton or silk plant or from wool (as shown here) would have been done by hand with a brush.



Arkwright's machine dated 1775 had a comb that went up and down as the fibres turned on the 'doffing' cylinder. This drew out the smooth fibres and also removed any leaves or seeds.

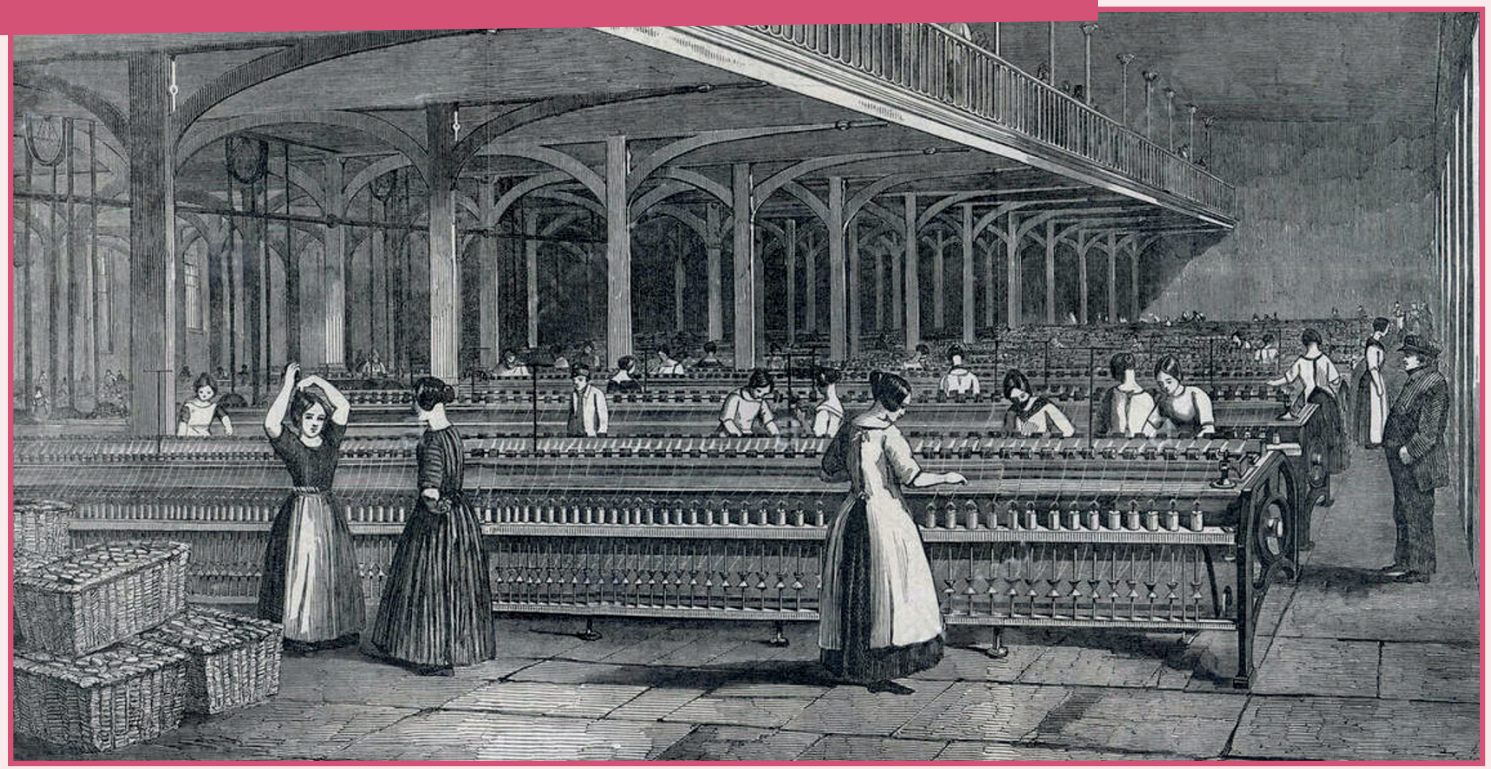
Spinning

Hargreaves' Spinning Jenny, invented in 1764, enabled eight threads to be spun at once and would have greatly enhanced the cottage industry (stockings made in people's homes).



The invention of the Crompton mule in 1779 meant that yarn could be mass-produced.

Cotton doubling



Doubling is the term used to describe combining threads during spinning.

During the carding stage several strands of roving (a bundle of fibre) are doubled together and drawn, to remove variations in thickness.

Bleaching

Bleaching removes the natural colour from cloth before it is dyed.

Before chemical bleaching agents were invented, cloth would be laid out on the fields for several months to be naturally bleached by the morning dew and the sun.

Bleekveld in een dorp
(Bleachfield in a village), circa 1650

by Jan Brueghel the Younger

Dyeing

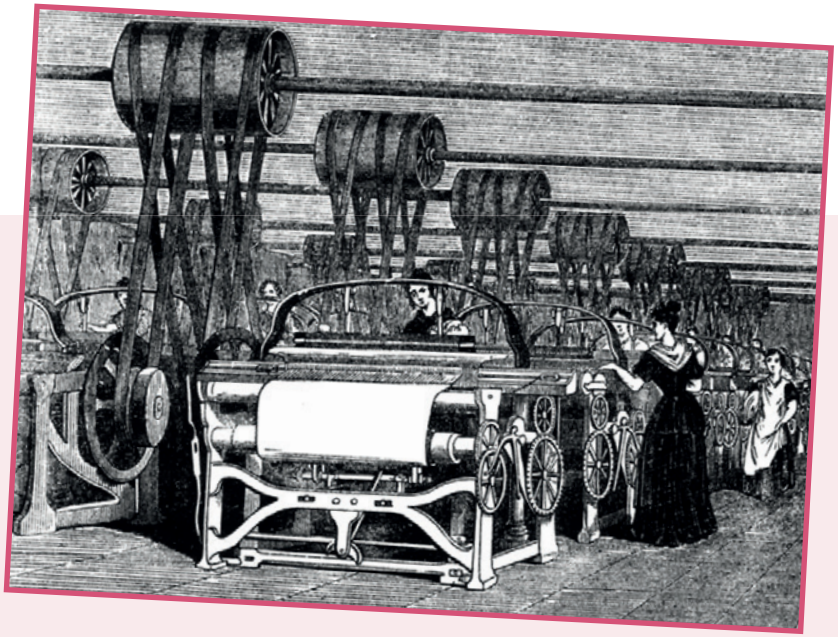
Dyeing was often combined with the bleaching process in the mills. At this stage yarn is coloured with a variety of dyes or pigments to permanently change the colour of yarn.

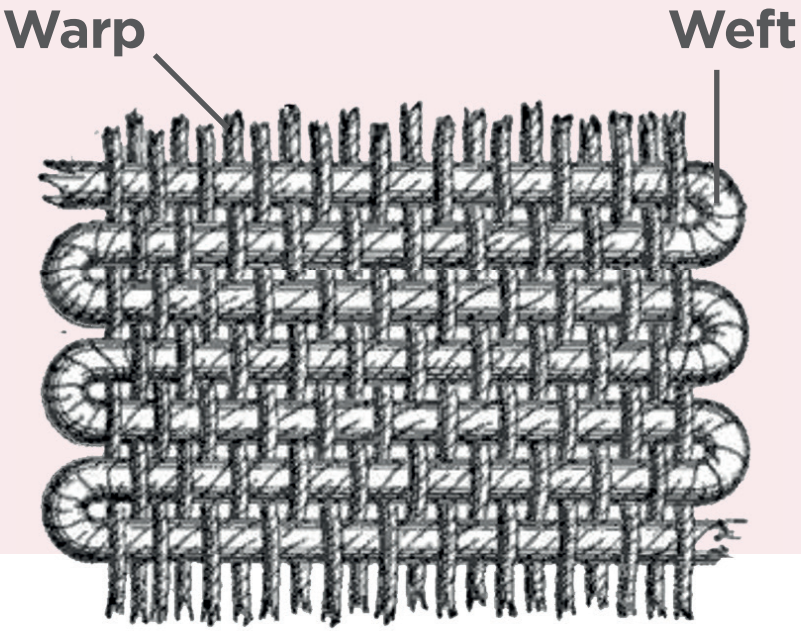
Insects, plants and minerals out of the ground were used as early dyes before synthetic dyes were invented.

Weaving

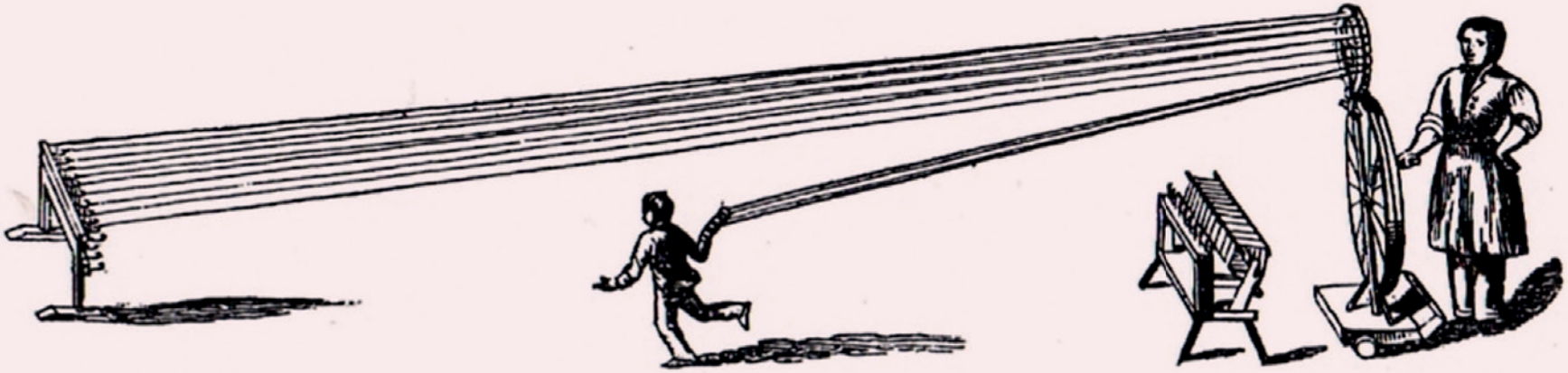
Weaving is the part in textile production in which two sets of yarns or threads are interlaced to form a fabric or piece of cloth.

The threads that run longways are called the warp and the ones running across (from left to right) are the weft or filling weaving, is done on a loom.





Silk throwing



Children helped with the silk throwing process.

As the wheel containing the raw silk was turned, the child would run the length of the ‘shade’ carrying a rod containing four bobbins of silk to hook the threads on the pins at the end, before running back to collect the next rod.

They could run up to 14 miles a day, all barefoot.