



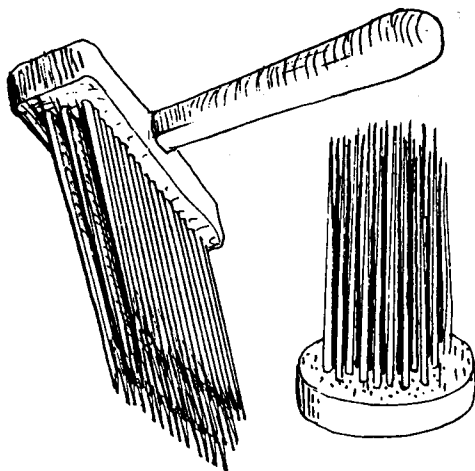
Penny Walton

The York housewife in the Viking Age was very skilled at cloth-making. She could take raw flax or wool and spin yarn, weave it into cloth, dye it or bleach it, and then cut it up and sew it into a garment. She could also make socks and gloves with nothing more than a bone sewing needle and a ball of yarn; and with some fine silk thread she could weave a prettily patterned braid and perhaps decorate it with gold thread. Those who wanted wool or linen cloth of finer quality than that made in the ordinary home would be able to buy it in the market place, as well as expensive silks and ribbons.

Linen is made from flax, a blue-flowered plant with slender stems which can after soaking be worked into a mass of fine fibres ready for spinning. Stems and seeds of flax used in Viking times have been found at Coppergate.

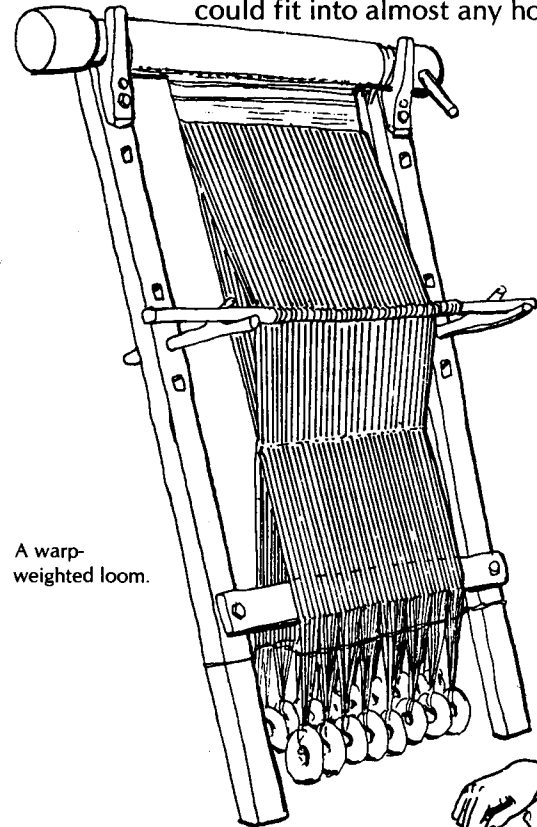
Wool came from local sheep. Some of it was fine, but most was very coarse, as surviving fragments show. If a smooth yarn was wanted, the coarse wool fibres would be combed with a large iron tool that had long prongs and a wooden handle. One found at Coppergate still had wool fibres wrapped round the teeth.

Tools for preparing wool (left) and flax (right).



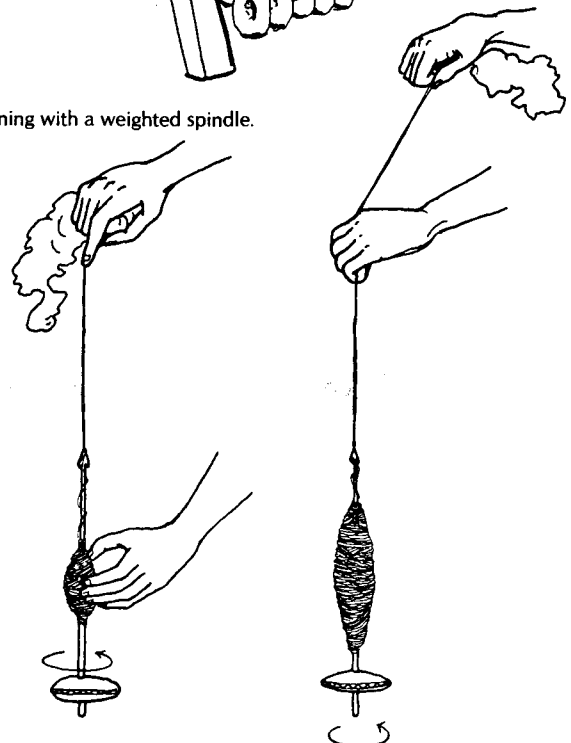
In order to spin, Viking women bound the raw fibre onto a stick called a distaff, and pulled out a length of fibre, twisting it with their fingers. It was then fastened to a spindle, a long piece of wood or bone with a notch at one end, and a 'whorl' of clay, stone or bone around it to give it weight (spindle-whorl). By gently pulling out more raw fibre, and twisting the spindle so that it spun evenly, more and more yarn was produced. Some very fine (thin) yarns have been found at Coppergate.

Then the yarn was woven into cloth. This was done on a very simple loom made up of two upright pieces of wood joined by a beam set loosely in supports at the top, with a second beam across lower down. The loom leaned against the wall when in use, but could be folded up and put away afterwards, so that it could fit into almost any home.

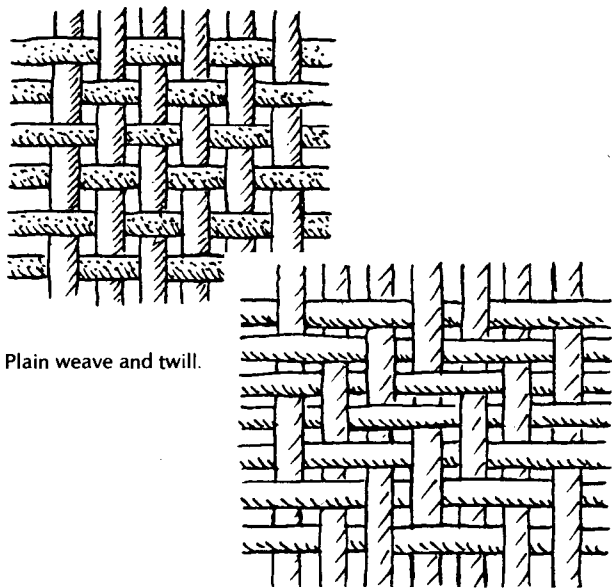


A warp-weighted loom.

Spinning with a weighted spindle.



Warp threads of yarn hung down from the top beam and were pulled tight by clay weights. Alternate warp threads hung in front of the lower cross beam, while the rest hung vertically down the back. A thin shaft, slotted into supports set in the uprights, was attached to the back set of warps which were brought forward when the shaft was lifted; a thread (weft) could then be passed through crossways. The shaft was then let go and another weft put across. These two rows were repeated, so making plain weave cloth. Extra shafts could be used to make more complicated patterns like the chevron and diamond twills found in York.

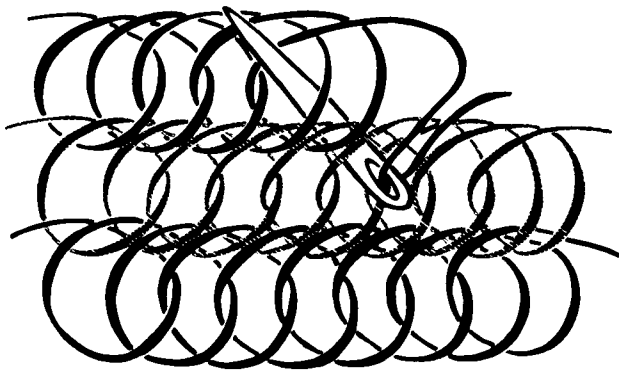


Plain weave and twill.

Once the cloth was woven and taken down from the loom, it could be used in its natural colour or it could be dyed. Dyestuffs could be bought in the market, either brought in from the surrounding countryside or from further afield. The leaves of the woad plant were used for blue, the whole of the weld plant for yellow, and the root of the madder for orangy red. These were boiled up in dye vats into which the cloth was dipped; it could be taken from one dyebath to another to produce green, purple or black — both the Anglo-Saxons and Vikings enjoyed wearing strong colours! Linen was usually bleached rather than dyed, and then pressed smooth with a large glass object (linen-smoother), before being made into shirts and underclothes.

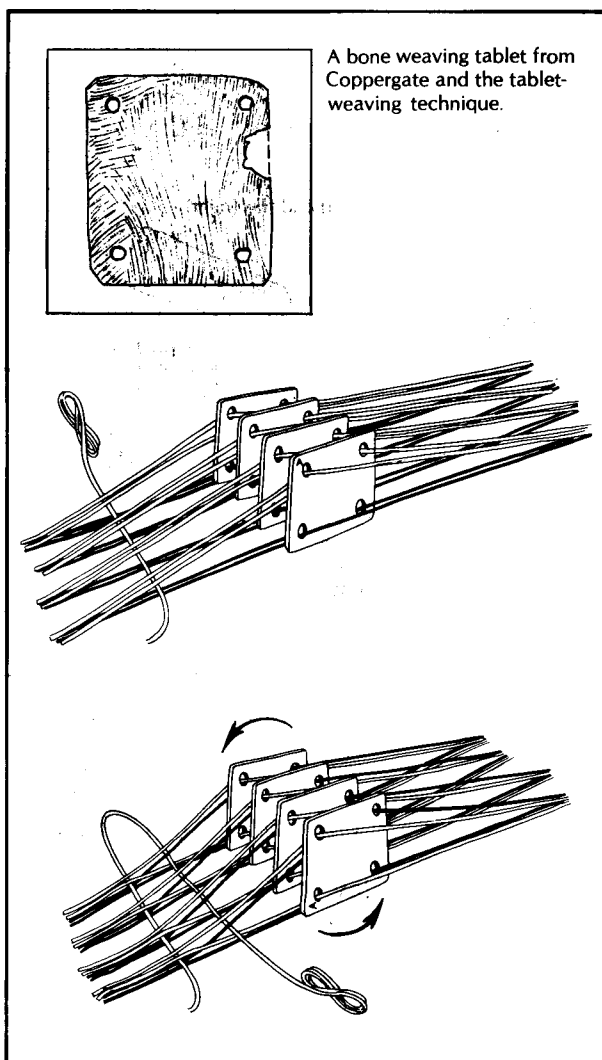
The well-off could have their clothes edged with colourful braids made of silk yarns, to add a touch of luxury. To make the braids, several square bone tablets with a hole in each corner were needed, as can be seen in the diagram. As the tablets were turned, cords were made, side by side, and these were held together by a weft thread so that a flat braid was produced. Many different patterns could be made using this method.

Naalebinding.



A sock from Coppergate had been made by another method known as naalebinding. Using a thick sewing needle, usually of bone, the yarn was worked into rows and rows of loops, going round and round. The sock was shaped by adding or reducing the number of loops in the row.

The finest cloth of those times no doubt came from other parts of Europe and the Near East — but items for everyday wear were made in the ordinary Viking home, using skills passed on from one generation to another.



A bone weaving tablet from Coppergate and the tablet-weaving technique.