

Flax

AND

Wool

A READ IT - TOUCH IT BOOK

CREATED, HANDSET & PRINTED

AT

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INTRODUCTION

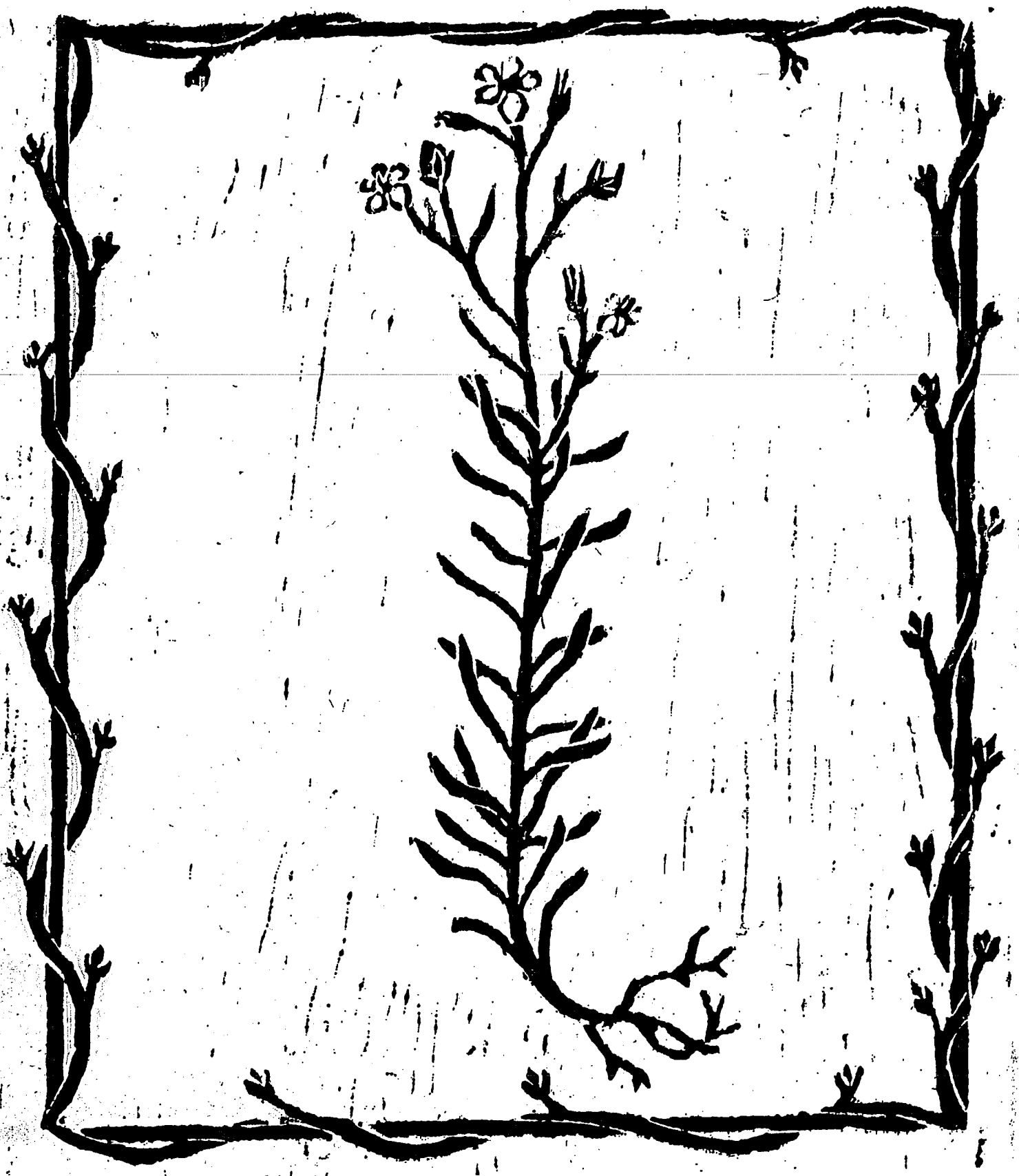
Farmers in colonial America depended on their own crops and livestock for clothing and food. They raised the flax plant, to make linen cloth, and sheep, for wool cloth.

Flax seed and sheep were brought from Europe in the 17th and 18th centuries.

From the planting of flax seed in spring, it takes a year before linen is ready to be made into clothing. Making wool cloth from sheep takes less time, fewer steps and fewer tools.

This booklet will show how flax and wool were processed by hand in colonial times using simple tools and how you can use the same tools today to make your own clothing.





FLAX

Flax was originally made into baskets 10,000 years ago in Europe. Flax means to plait, which is how baskets are made. By 4,000 B.C., the Egyptians were making cloth from flax, with the best linen kept for the Pharaoh.

The fibers that are spun into linen thread are on the outside of the plant's hollow stalk, allowing it to grow tall and flexible without breaking. Flax has only a few branches at the very top. Its small, sky blue flowers turn into pods with six to eight seeds in each pod.





PLANTING

Flax is one of the first plants grown each spring. Its tiny seed was scattered on the field by hand in colonial times. It was sown thickly, like grass, so the plants would grow close together and choke out any weeds.

Farmers planted one quarter acre for each member of the family which, when processed, would make about 25 yards of cloth per person, the equivalent of four shirts, three pairs of trousers and two sheets.

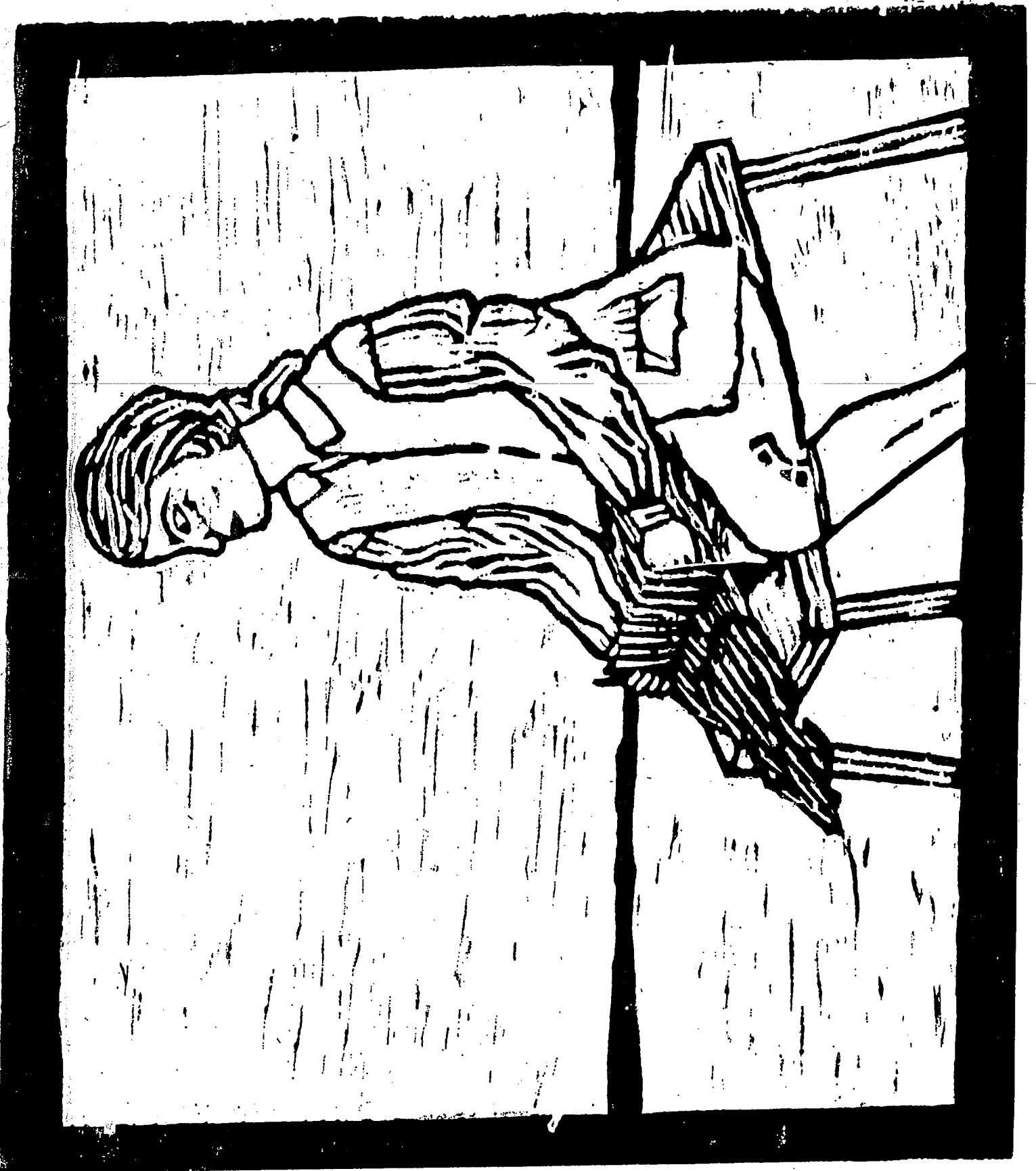




HARVESTING

Flax grows quickly; within two months it can be three feet tall. When the bottom of the plant turns yellow and the lower leaves fall off, the plant is ready to harvest. It is not cut like wheat or rye because the fibers go from the bottom of the root to the top of the stalk. Traditionally, it was pulled out of the ground by hand. Each handful was tied into a bundle and about 30 bundles were stood together to make a shock until the stalks dried out.





RIPPLING

When dry, flax was pulled through a rippling comb, a single row of long iron nails set in an iron base. Some combs were cut from wood.

Rippling pulls the seed pods off so the seeds can be saved. The pods are crushed and the chaff is blown away to clean the seed. After saving enough seed to replant the next year, the extra seed was taken to a linseed oil mill where the oil was pressed from the seed. Farmers sold the oil which was used to make paint, printer's ink and to burn in oil lamps for light.





RETTING

Retting is a rotting process that separates the fibers from the stalk. Retting was often done by submerging the stalks for a few days under water. British settlers preferred such water retting for the blond color it gave the flax.

German settlers generally laid the stalks back on the field in long rows. Such dew retting took four to six weeks to turn the flax a silver color.





BREAKING

A wooden flax brake smashes handfuls of stalks between upper and lower blades. This shatters the stalks without damaging the fiber.





SCUTCHING

A wooden scutching knife cleans much of the shattered stalk from the fiber by scraping it against a vertical wooden board.





COMBING

Combing is the final stage before spinning. Hundreds of nails are pushed through holes drilled in a board. The flax fibers are pulled through the nails, cleaning the fibers. The chaff is left in the nails, as are many short fibers called tow, which can be made into rope and coarse cloth. The fibers are stored in braided hanks called stricks until they are spun during the winter.





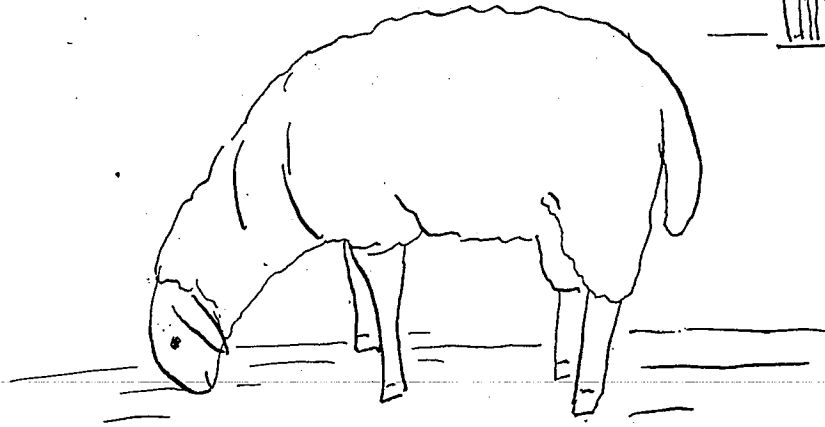
SHEEP

Sheep are raised for meat and for their fleece, which keeps them warm in winter.

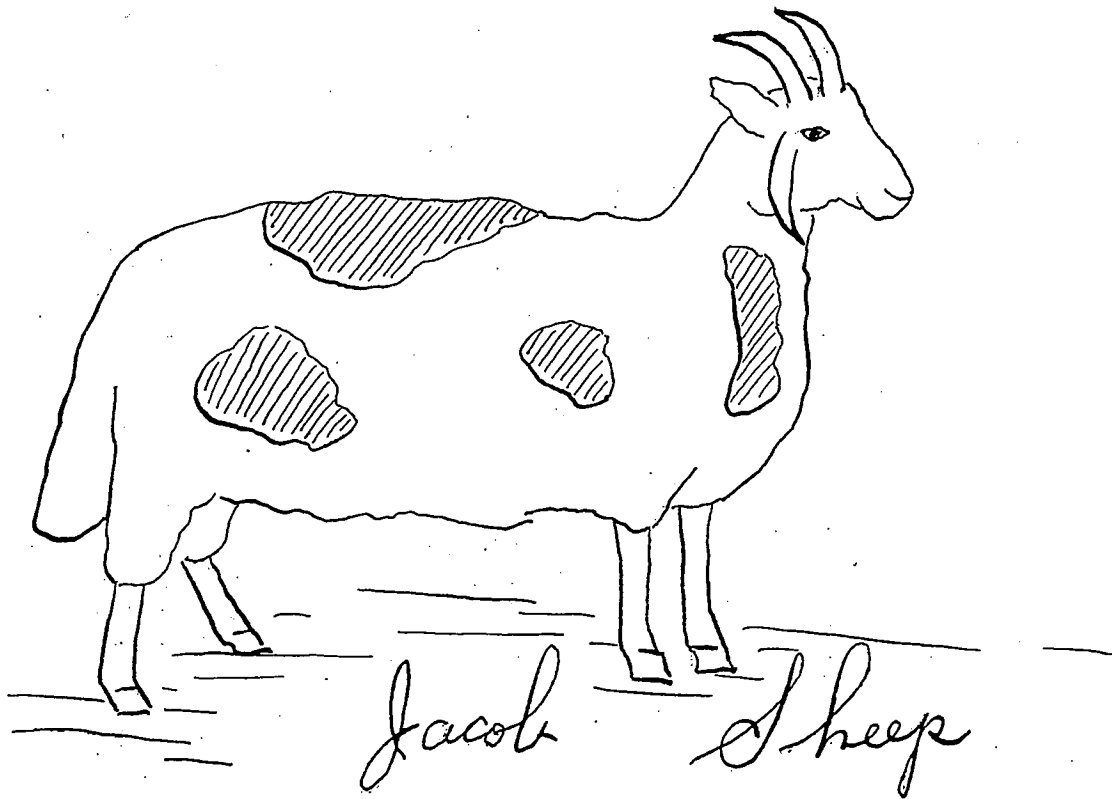
The spotted Jacob sheep is a rare breed from England with a small body, short, coarse wool and up to four horns.

The white, hornless sheep, Border Leicesters, are also from England. Their fleece is long and fine, making it easy to spin.





Border Leicester Sheep

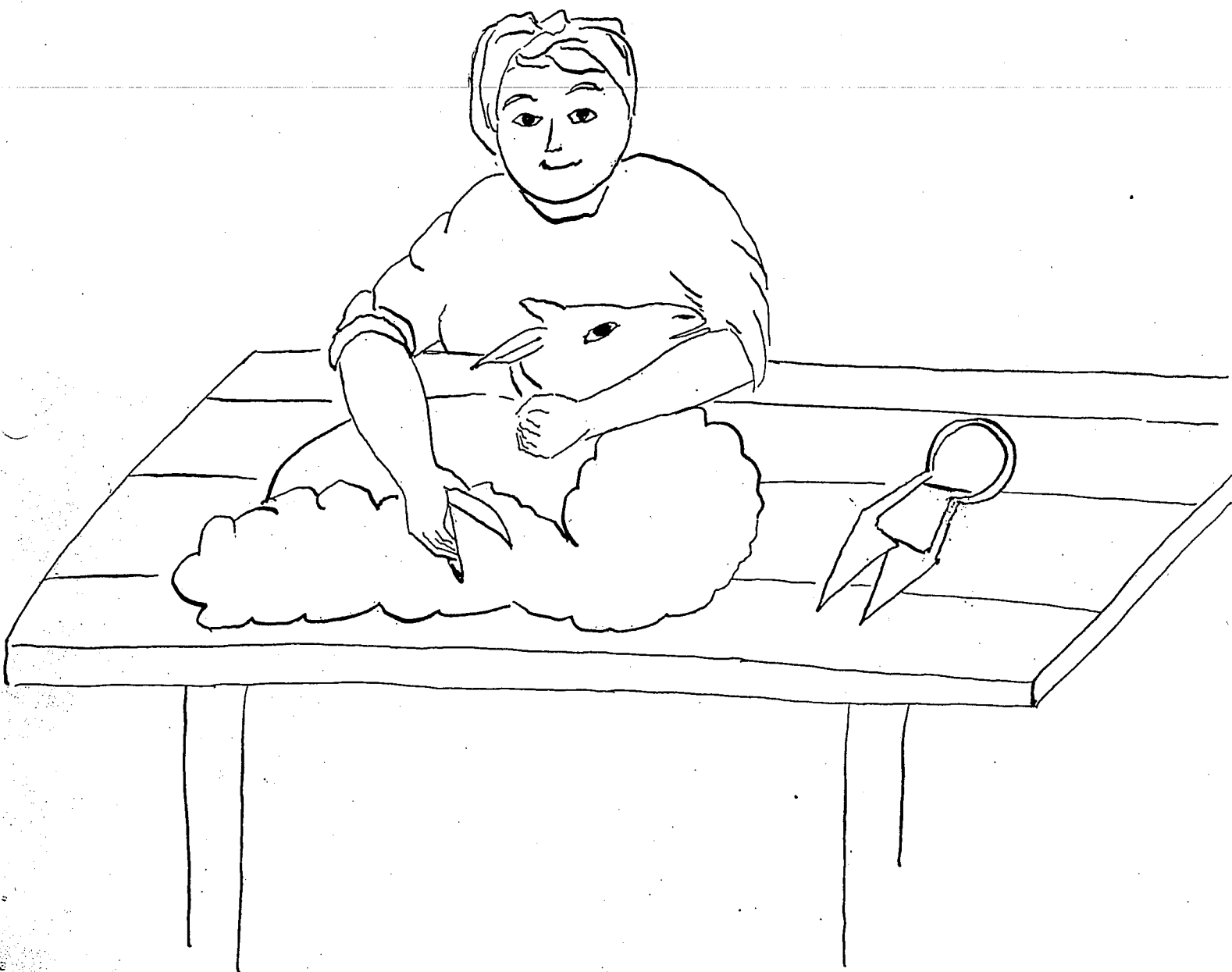


Jacob Sheep

SHEARING

The fleece is cut, or sheared, in the spring with heavy-duty scissors called sheep shears. Since parts of the fleece are better than others, it must be picked through and sorted before combing.





Sheep Shearing

COMBING

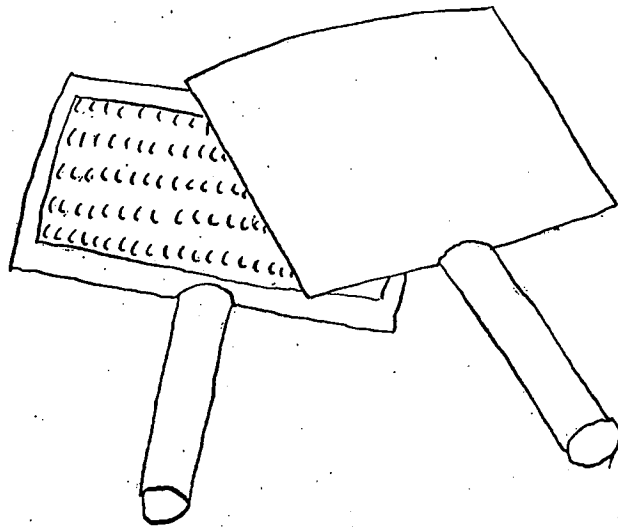
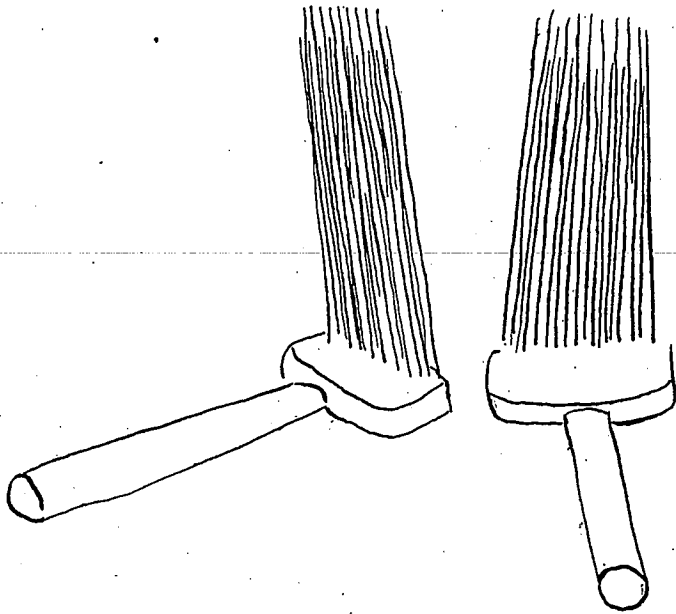
Combing straightens wool fibers to spin them evenly.

Each comb has hundreds of small pieces of wire sticking through a piece of leather. Holding one comb in each hand, the wool is pulled back and forth between them, making a rolag, or hank, that is held in the hand during spinning.

Worsted combs have several rows of tall, thin nails through which the wool is pulled, making an even finer, thinner thread.



Worsted Combs



Carding Combs

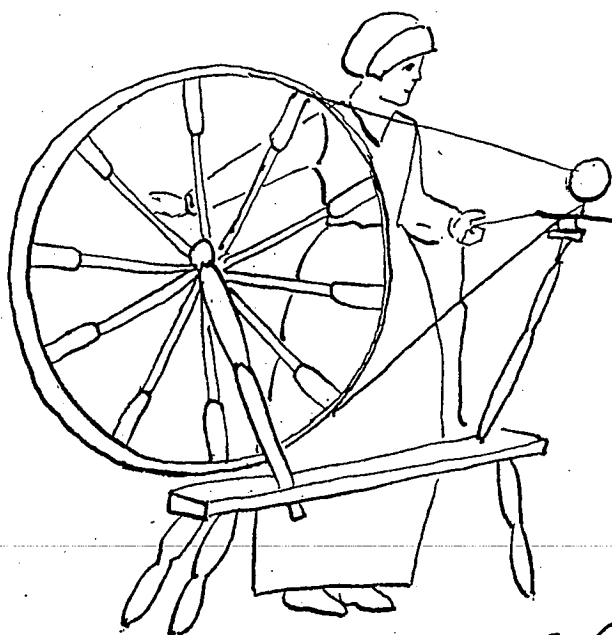
WOOL SPINNING

The large diameter wool wheels twist the wool fibers more slowly than the small flax wheels, keeping the weaker wool thread from breaking.

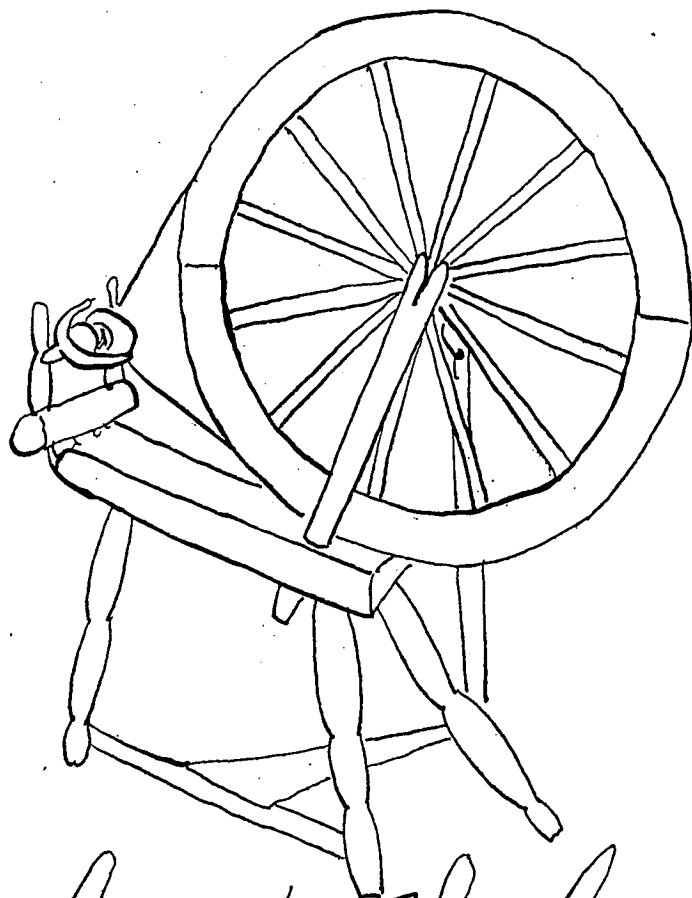
The simple walking wheel does not use a treadle but is turned by hand while standing. After making about six feet of thread by walking backwards, holding the fiber in one hand, the wheel must be stopped so the thread can be wrapped around a spindle before spinning more.

The smaller wool wheel uses a foot treadle so the spinner can sit down. It makes thread while storing it so the wheel does not need to be stopped.





Walking Wheel



Wool Wheel - Canada

DYEING

Dyeing cloth different colors among British settlers was traditionally done in the home. It was limited to the types of dye ingredients found around the farm, such as roots and nuts, which were boiled to make colors like yellow, red and brown.

Traveling peddlers sold lumps of crushed indigo, from a southern plant, to make blue.

German settlers often paid professional dyers to make a wider range of colors using exotic ingredients from around the world.





WEAVING

British settlers generally did simple weaving in their homes while German settlers typically paid professionally trained weavers to make more difficult and complex fabrics as well as sturdy cloth for daily use. In addition to clothing, fabric was made into bedding, towels, storage bags, wagon covers and sails. A good weaver could make about six yards of cloth a day.

In colonial times, linen cloth was worn year round with woolens added as it got colder.

Linsey-woolsey is a combination of fibers that combines the strength of linen with the warmth of wool.





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CONCLUSION

Today, linen and wool fabrics are still made but all of the steps are done with machinery. However, it is still possible to make your own clothing from flax and sheep using tools you can make yourself just as it was done in colonial times.

