

# Mother Watkins' Textile Primer

by Kara McLeod



The clothes you are wearing would have been made of all natural fibers; these include wool, silk, linen, cotton and hemp. Here is some of the information you, as a typical Elizabethan, would know.

## Wool

English wool was renowned as the finest wool cloth available. However the best dyers were Flemish, so English wool was exported to Flanders, dyed, then imported back into England. The English dyeing industry was alive and well. Most wool cloth was finished in England; it was only the most expensive which was sent over the channel. Dyers in England were well paid and English merchants tried to entice Flemish dyers to England.

Wool begins on the sheep. Before shearing, a small stream was dammed to create a pool. The sheep were herded in to the water where the shepherd washed the fleeces with washing lye. The sheep rinsed themselves off by swimming out, then dried naturally. Wool is sheared off in a whole, joined fleece. Before spinning the coarse "top hair" must be removed; these stiff hairs will not spin a fine wool thread. Most country folk grew enough wool for their own household use. After weaving, the cloth needed to be "fulled" under water either by treading or beating. After fulling the wet cloth was stretched out on high stakes along one selvedge (like a sail) while the lower selvedge was pulled taught and fastened to the ground by "tenter hooks" and left to dry taut. Large open spaces are needed for this operation and these areas are called tenters' squares or fullers' yards. Queen Elizabeth required all Englishmen to be buried in woollen shrouds, to wear a wool cap on Sundays and that cloaks and hose for common men be of wool. The Elizabethan economy was to be rebuilt on wool; linen was only to be used for shifts and shirts.

## Different wools were used for different purposes.

Felt: felt is made by heat, moisture and agitation. This causes the fibers to mat and join together creating a nonwoven cloth. Wool felt can be shaped into socks and hats; it was used as padding inside bound books and had a variety of other uses. Handmade felt was made with a pile of wool fibers and soap suds rubbed together. Hatmakers use wool, beaver, or rabbit hair felt.

Boiled wool: a thick, dense woven wool which is felted after weaving with steam.

Gabardine: twill fabric (with a diagonal rib) originally from Spain. Gabardine also describes an outer cloak.

Loden: thick wool from Austria - almost always dark green.

Merino: very expensive Spanish wool.

Baize: a coarse woollen used for clothing.

Camlet: a light material popular for clothes made from the wool of the angora goat. Also made of mixed fibers- sometimes "half hair, half silk".

Kersey: lightweight woollen, usually plain weave, cloth which by now (end of the 16th century) is used mostly for boot hose or by those of lower social standing.

## **Linen**

Linen is the cloth woven from the fiber of the flax plant. Flax is pulled at harvest and then soaked to release the fibers. The law requires one rood of flax be planted per every sixty acres. Linen is used for sheets, shirts, shifts and tablecloths. Church altar cloth is usually linen. After harvest the flax stems were either set in shallow water to rot or they were laid out and water poured over them. The first method is easier but produces fibers that are yellowish instead of white. After soaking the stems were beaten, the fibers separated and the flax was "hackled" or combed. Flax fibers are long, lustrous and silky so a lovely thing to say to a woman is that her hair is as smooth and fine as combed flax.

Linen sheets for washing were packed into baskets and had lye poured through them from the top. They were beaten and then rinsed with fresh water. This was called leying the bucks. The linen was then spread out to dry and bleach in the sun.

In everyday usage the word linen can also mean undergarments. The fiber content is not relevant in this usage. The lady of the house could refer to her chemise as her "silk linen" if her chemise is made of silk. Nightcaps could be made of linen or wool but should have a hole in the top if you are following the latest medical advice.

Linsey-woolsey: a plain or twill weave coarse fabric made from a combination of wool and linen fibers.

Lawn: a fine, soft, sheer, lightweight plainweave linen used for ruffs and collars.

Cambric: a fine, stiff, sheer, tightly woven fabric so fine that "the greatest thread" is "not so big as the least hair that is" (Stubbes, 1583).

## **Silk**

Silk is imported from Persia, Syria, Iraq and the Far East. There is no English sericulture, and only whole cloth, rather than silk fiber, is imported. The silk industry was the financial basis of the Italian renaissance and Italian weavers created exceptional fabrics including brocades and velvet for export.

Brocade: fabric that has a high/low relief pattern woven in, usually in many colors. The pattern is non-reversible.

Satin and Velvet: Silk is the only material used for these luxury fabrics.

Taffeta: a smooth tightly woven fabric that looks the same on both sides. Taffeta has a characteristic rustle and a dull shine. It can be either soft or stiff.

Lutestring/lustring: A fine, lustrous taffeta.

Sarcenet: a very soft taffeta with a dull lustre.

Raised velvet: velvet which has had some of the pile removed or cut to create a raised pattern in the remaining pile.

Granado silk: a light to medium weight silk used mostly for shirts and chemises. Very expensive (2 shillings and eightpence in 1561). Similar to modern crepe de chine.

## **Cotton**

Cotton was imported from Egypt and Spain. The Spanish had developed a cotton growing industry for the weaving of sails. By the 16th century cotton is coming into widespread use. It first appeared in England in the 13th century.

Fustian: a plain weave cloth similar to modern mediumweight canvas.

Millaine fustian: cloth with a silky texture made from cotton or flax mixed with wool used as a good substitute for silk.

Jean: a twilled cotton cloth or fustian.

Buckram: a coarse loosely woven fabric used mostly for boot hose and women's gowns. Buckram is a finer version of lockeram which was used for clothing for the poorer classes. Either cloth could be made from linen or from cotton.

Hemp: hemp is soaked the same way as flax then hung to dry and the fibers allowed to separate. This takes about 3 weeks. Hemp is used primarily for rope and sail fabric, however, hempen cloth is worn by the poorer classes and by servants. Hemp plants grow as male and female plants, so the harvest is staggered.

## **Miscellany:**

Horsehair was used for upholstery padding and to stuff the padded fashions of the time. Horsehair is springy and resilient and will bounce back to shape after having been crushed. The hair of oxen and goats was less valuable and was often classed with the waste hair left over from tanning in lime vats. This hair still contained animal oils so that, as the Upholsterers' Guild complained, "when warmed by the heat of a man's body it engendered a stink so pestilential that many were destroyed thereby".

Leather was made by scraping the hides clean of all flesh and fat then left to soak in lime vats to remove the hair. This is a smelly process. When all the hair fell out of the skins they were removed and the last layer of subcutaneous fat was scraped off. The lime and hair residue left in the vats was used for plastering. The skins were now ready for tanning. The skins were soaked in a bath of bark or other acid dressing; mixtures for leather dressing varied. After the acidic bath an alkaline dressing was used to "bate" the skins. Alkaline dressings were usually fairly disgusting, including things like pig and dog droppings, and fatty animal tissue like brains. After that the leather is "filled" with something like chalk or soap then burnished and coated with a thin size made from boiled hooves. Large estates dressed their own leather. Leather finishes ranged from soft glove leather to cuir bouilli (leather boiled in wax) used for armor.

Dyestuffs imported included wood from Brazil, the Indies and Ceylon; cochineal from Armenia; indigo from Baghdad; henna from Arabia and saffron from India. Locally produced dyes came from a multitude of sources. The most commonly used and least expensive red came from madder (fermented oak root or the root of the madder plant). Madder and cochineal were not the only sources for red dyes; depending on the local resources, red could be obtained from plant berries, blossoms or the dregs from the wine barrels. The simplest colors to get are greens, browns, yellows and greys. Blue was most usually got from woad

and it was not uncommon to have a woad pot going continuously into which things would be periodically dipped to refresh the color. Woad pots are very stinky; not only because of the plant material itself, but because a frequently used mordant was urine.

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