

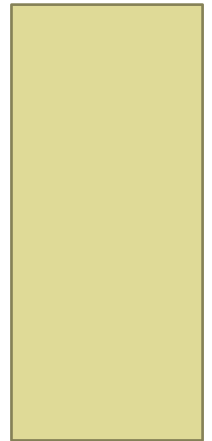


Carpetmaking was an annual activity.

ONE WEAVER'S JOURNEY:

AN EXPLORATION OF PRE-INDUSTRIAL
TEXTILE TOOLS AND FIBERS

Cathy Koos Breazeal 2013



SPECIAL THANKS

- Special thanks to the Golden Gate Weavers Guild of Berkeley, California for their kind financial support of this project and launching me on what looks to be a lifelong journey!

INTRODUCTION

- “If you want to know about a culture, look at its cloth. The materials and tools speak to us of place, and the designs handed down the generations tell us the stories of a people.” -- Anita Osterhaug
- Come with me on my journey of exploration, focusing on Colonial-era textile tools and the people who used them.



A STEP BACK IN TIME

- First we will take a little step back in time to those early twisters of fiber 40,000 years ago
- By 26,000 BC needles were common, along with shell and bone beads with drilled holes.
- A well-preserved piece of neatly twisted and plied cordage dates back to about 15,000 BC
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A STEP BACK

- CORDAGE could be produced by anyone in camp or on the trail, but women often crafted their fiber needs concurrent with their child-rearing duties
- Hard twisted on the thigh, cordage plies back on itself, creating a strong sturdy fiber.
- Various wild products were used – inner bark, nettles, flax, hemp



MOVING ON TO SPINDLE SPINNING

- Early spinning was spun by rotating a stick or spindle. Addition of a whorl reduced wobble and increased productivity.
- Easily set down, it was another easy chore for child-rearing women
- Later addition of a distaff greatly increased production again



ON TO WEAVING

- Early weaving was little more than darning a web of fiber. It took several thousand more years to come up with lifting devices.
- First backstrap style looms capable of weaving narrow textiles



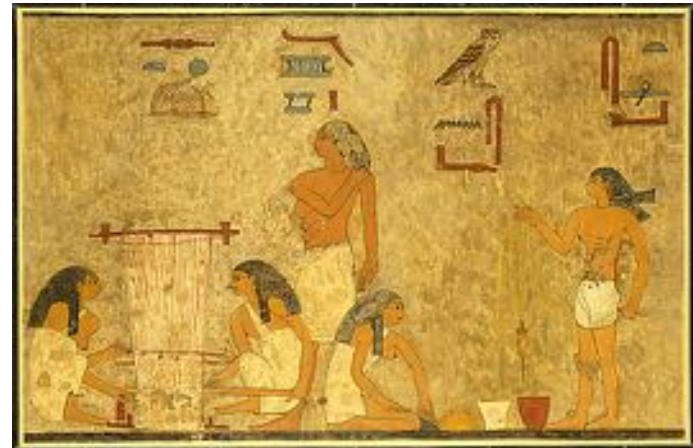
WEAVING

- Next came horizontal ground looms. They left their evidence as post holes in the floors of early dwellings and loom weights scattered about.



EARLY LOOMS

- Next, appearing in Hungary and spreading north and west across Europe and into Egypt was the next step – the wall loom. Many examples remain are displayed on wall art and on pottery.



EARLY WEAVING

- By 4000 BC, nearly every dwelling had a wall loom. Hungary remained a textile innovation hub and weaving moved beyond function and utility to something pleasing to the eye.
- Colored thread also appeared around 2000 BC, and intricate patterns of spirals, lozenges, and hearts graced regional folk costumes
- 800 BC brings us to the late Bronze Age and the Hallstatt culture and creation of early twills.

WEAVING ADJUNCTS

- About 2000 BC, pottery bowls with inner loops arrive – apparent linen wetting bowls



SPRANG

- Sprang also appeared in the Bronze Age with a technique similar to netting and predating knitting. The oldest surviving piece of sprang, found in a Norwegian bog, dates to about 1400 BC.



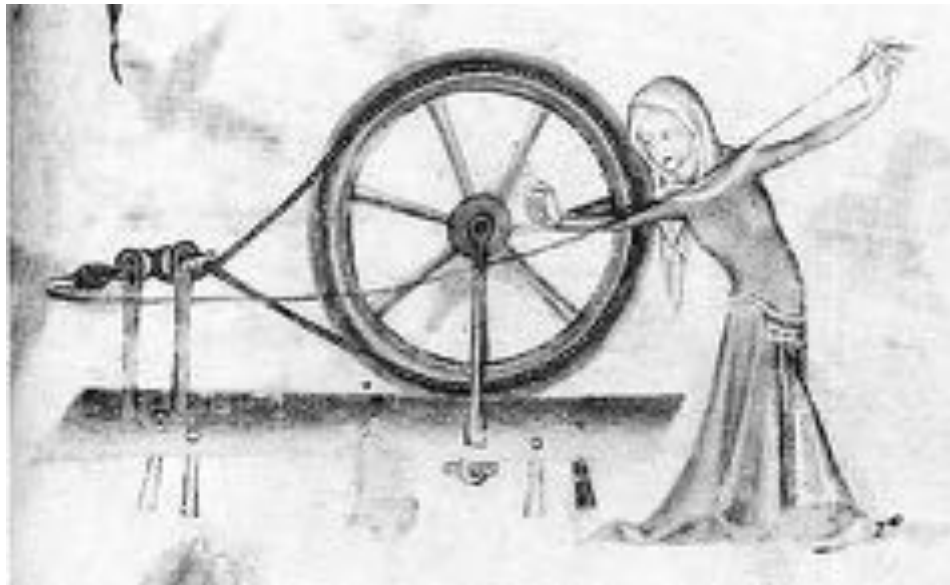
CARDING & COMBING FIBERS

- Early on, textile artists recognized the need to orient fibers by combing. Only in the Medieval times did a carding tool develop: wool teasels set on a board. This example is from the Oakland Museum.



SPINNING WHEELS

- Spinning wheels made first appearance early Middle Ages, likely from travelers to China and India
- Example early Saxony wheel, c 1330 CE



MEDIEVAL ESTATES – THE GUILDS

- Medieval towns arose and demand for textiles increased and soon men took over the occupation of weaving and dyeing. Women still spun from home, but weaving and dyeing now occurred in districts or estates within a town. The guilds continued to dominate textile production in Europe until the end of the 1700s when guilds fell out of favor and trades became more independent.



COLONIAL AMERICA

- William Penn's Great Experiment attracted not only farmers but many skilled artisans to his new colony.
- Huguenots, Anabaptist-Mennonites, Schwenkfelders, Moravians
- Loyalists to King Louis XVI and Marie Antoinette were also offered sanctuary along the Susquehanna River in Penn's Woods in a new town, French Azilum. Very few actually effected their escape



COLONIALS

- Often when packing for the Colonies, women would save space and only bring the flyer and maiden assembly for their spinning wheels, knowing colonial craftsmen could reproduce the wheel, table and footman
- In a sense, due to their isolation from new innovations in Europe, the colonists went back in time to textile production in the home, rather than the towns.



Ca 1805 barn loom, Orwell, PA

COLONIALS

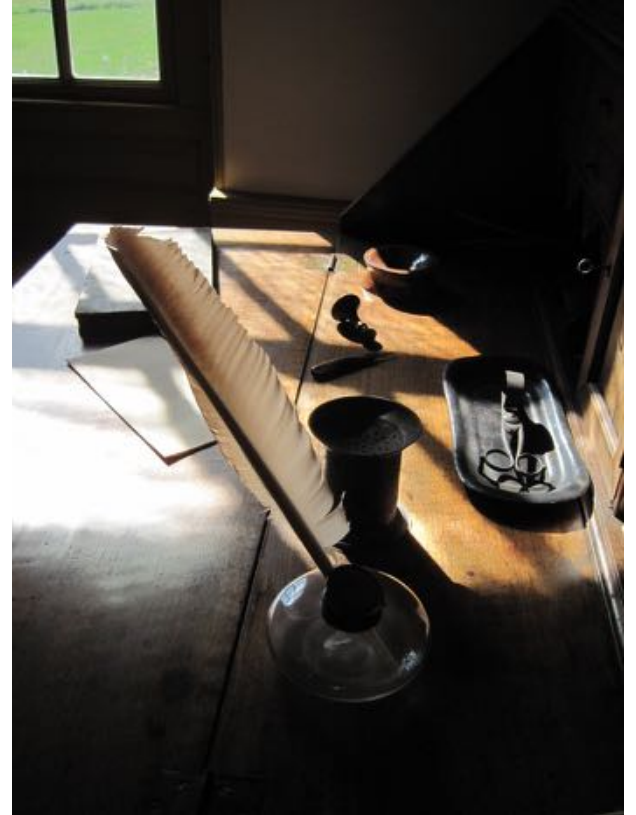
- Every spare moment, the women spun yarn, as it took about 10 hours of spinning to keep the weaver busy for one hour. Barns frame looms were built in many remote homes, often in the loft, weaving the needs of the family
- As towns built up and sprawled, these timber frame looms evolved into a more commercial use, with home spinners still producing the yarn, then delivering the yarn to the weaver to produce lengths of household fabrics that would in turn be sewn back into garments at home

ITINERANT WEAVERS

- Lots and lots of controversy on this topic ranging from “never” to “of course”
- Likely the truth lies somewhere in between and varied geographically.
- As pioneers moved further west, they were more isolated from the services of town, so the pioneer women probably woven most of the regular household items like towels, linsey woolsey for clothing, but either waited for the itinerant to come by for the fancier items like coverlets or went to town

BRITAIN AND CLOTH

- As the colonial population increased in size, Britain disallowed the weaving of any wool cloth in the Colonies – an effort to salvage their wool industry in England.



THE FIBERS

- As with the Paleolithic fibers, the colonists used some wild nettles and dogbane, but primarily grew hemp and flax.
- Hemp was a critical fiber for the British Navy for sails, ropes, and caulking on the ships.
- Every colonial household had a hemp patch



THE FIBERS

- Silk was attempted in several of the colonies and failed; tobacco was easier to grow and more valuable
- Flax was the other key bast fiber – each household raised about $\frac{1}{4}$ acre of flax per member



PROCESSING FLAX

- Spring planting, then harvested a month after flowering
- Stalks were pulled out of the ground, not cut
- Rippling removed the valuable seed stock
- Then the stalks were retted or rotted for up to a month, then placed in a brake to start stem removal



PROCESSING LINEN

- Then the scutching knife was used to peel away more woody stalk, revealing fine fibers



FLAX PROCESSING

- Next the hackle, hetchell, heckle to thoroughly clean and orient the strands



WOOL

- Other than silk, the only animal fiber used was wool. During colonial times, raw wool was shipped to England for processing into cloth, discouraging the colonies from producing their own and creating dependency.
- When the Revolutionary War erupted, the British set up a blockade, preventing any other sympathizer countries from providing textiles and goods
- Now the colonists were back to producing their own textiles in America

THE NEED FOR CLOTH

- The colonists found a need for cloth to make uniforms, so weavers set to work once more, fulfilling their patriotic duty to clothe the troops.



LOOMS OF THE COLONIES – 1805 BARN FRAME LOOM, ORWELL, PA



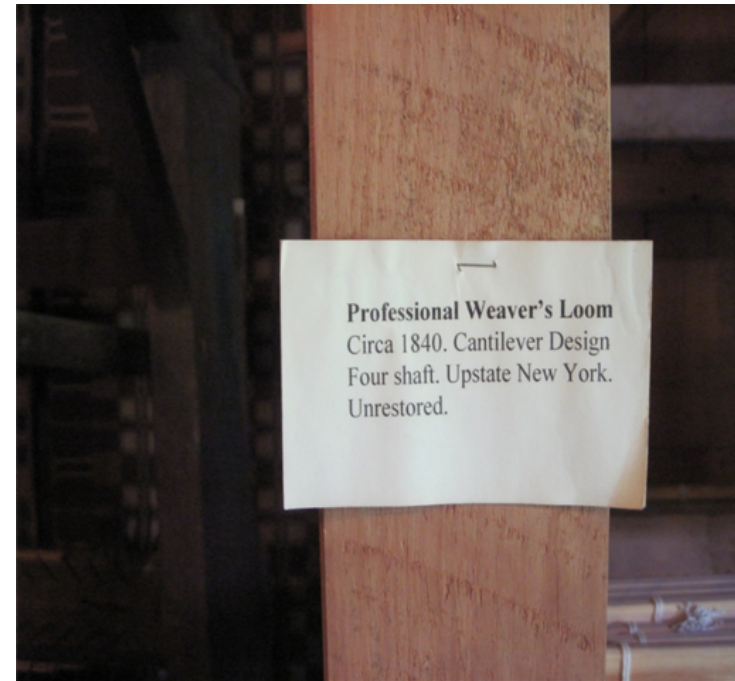


Barn Frame Loom

Circa 1840. Two-shaft linen loom. Found in the George W. Brown home in Orwell Township, Pennsylvania. Restored to original condition.







Professional Weaver's Loom
Circa 1840. Cantilever Design
Four shaft. Upstate New York.
Unrestored.





NEWCOMB RUG LOOM





IRISH LINEN CENTER, LISBURN, N. IRELAND



IRISH LINEN CENTER, LISBURN



SMALLER WEAVING TOOLS

TAPE LOOM





DAISYTOWN, PA EASTERN EUROPEAN IMMIGRANTS

WHEELS, WHEELS, WHEELS AMAZING VARIETY



1 - Traditional Flax Wheel

Unsigned, Circa 1790 - 1810, American but signs of European influence.

2 - Dual Spindle Flax Wheel,

Signed "SP" Circa 1790, New England, sometimes called a "gossip wheel" suggesting that two spinners spun at the same time. Designed for spinning flax with both hands. Invented in England in the late 17th Century for use in orphanages to encourage orphans to spin with both hands to increase production. Orphans had to earn their keep.

3 - Irish Castle Wheel (flax wheel)

Unsigned, Circa 1860. Made by Daniel Danner, Mannheim Pennsylvania. Design said to have been developed in Ireland to occupy corner of a small cottage to conserve space.

4 - Farnham Accelerating Flax Wheel.

Signed "J.FARNHAM" Circa 1810, Owego, N.Y. Very Rare. Only three examples identified. May have been designed as an "inexpensive" wheel. Unsigned copies by other makers have been found. Not an efficient spinner.

5 - Accelerating Flax Wheel

Unsigned, Circa 1820, upstate N.Y. Note cast iron drive wheel and unusual metal oval-shaped flyer.

6 - Flax Wheel

Signed "SCHINGOVER" circa 1860, Northeast Pennsylvania. Design believed to have first have been used by J. Farnham.

7 - Canadian Production Wheel, Quebec

Unsigned wool wheel. Possible maker Louis Bisson who was noted for this type of flyer. Note its shape.

8 - Double Treadle Castle Wheel

Parts fastened with wooden pegs, accelerating drive wheel construction controlled by two drive bands. Knob to adjust tension.

9 - Flax Wheel

Unsigned, Circa 1800. From French Huguenots, who settled in the Hudson River Valley near New Paltz, N.Y.

10 - Canadian Production wool spinning Wheel

Unsigned, Circa 1890. Probably made by Rancois Borduas in Quebec, Canada for cottage industry spinning.

11 - Canadian Production Wool spinning Wheel

Unsigned Early 20th Century. For cottage industry spinning.

12 - Great Wheel

Signed "J.FARNHAM" Circa 1830. Owego, N.Y.

13 - Pendulum Wheel

Lyman Wight pendulum wheel made in 1864 in Wisconsin. He first manufactured this style spinning wheel in Pennsylvania in 1856.

14 - Factory Wool Spinning Wheel

Signed "WR" Circa 1810. Wheels of this type were used in spinning lofts, used by hired spinners.

15 - Great Wheel

Unsigned, Circa 1840 Typical Upstate New York Wheel.

PENDULUM WHEEL, 1864 WISCONSIN



DUAL SPINDLE FLAX WHEEL, 1860. TWO HANDED SPINNING



IRISH CASTLE WHEEL, FLAX, 1860; FARNHAM
ACCELERATING WHEEL, 1810; ACCELERATING FLAX
WHEEL, 1820



CHAIR WHEEL



PA DUTCH TEXTILE TOOLS - PLAIN AND FUNCTIONAL

Wheel signed "Sellers",
undated. Note
uncommon support strut
extending from wheel to
leg



GREAT WHEELS, PRODUCTION WOOL WHEELS



OTHER TEXTILE TOOLS

- Braid crusher for hat braids
- Two most common hat styles used by PA Dutch



OTHER TEXTILE TOOLS

- Click or clock wheel



OTHER TEXTILE TOOLS

- Hackles
- Carding devices
- Fullers teasel



FULLERS TEASEL



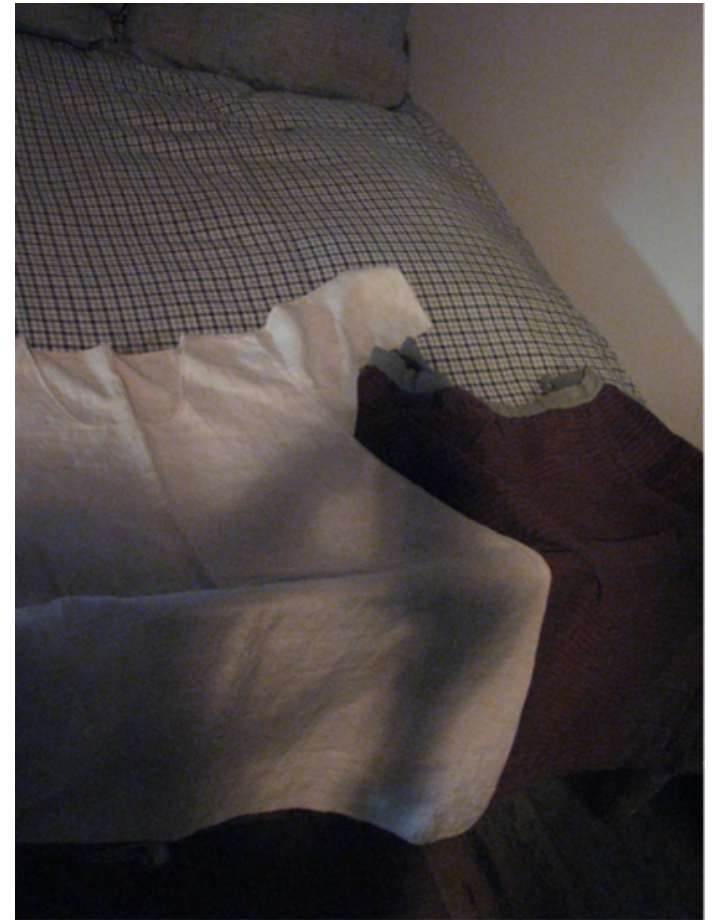
TAPE LOOM - MERCER MUSEUM



HOMESPUN AND WOVEN TEXTILES OF THE PENNSYLVANIA DUTCH



PA DUTCH SHOW TOWEL, BED LINENS, CHEMISE



COLONIAL GRAIN BAG



COVERLET IN THE MAKING



IN CONCLUSION

- It has been an amazing journey!
- Just like the Hobbit, the path continues on.....

