Hands On Learning
with Reading Museum Service

PERUVIAN BACKSTRAP LOOM G101



Thousands of years ago people discovered that if you take wool from some animals you can twist it together to form a thread. Archaeologists have found string skirts which are 20,000 years old.

The first threads may have been made by fastening wool to a stone which was twirled round until the yarn was sufficiently twisted. Then it was wound around the stone and the process repeated over and over.



Later thread (usually called yarn) was made with a distaff and a spindle. The distaff was a large stick on which a clump of unspun wool was held. The spindle was a weighted stick onto the top of which the rough wool was fastened. The spindle was then whirled which caused the wool to be drawn out and twisted. The yarn which was made in this way was wound on the upper part of the spindle.



The distaff and spindle method was the usual way of making yarn in Europe for thousands of years. The picture on the left is from the twelfth century and shows Eve making yarn in this way, while her baby sleeps in a cradle at her feet. Spinning wheels, which were invented in India, only became widely used in the sixteenth century. The picture on the right shows one in use in the seventeenth century. These machines made the process faster.

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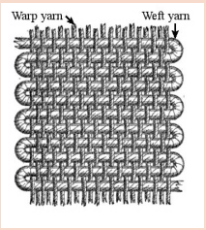
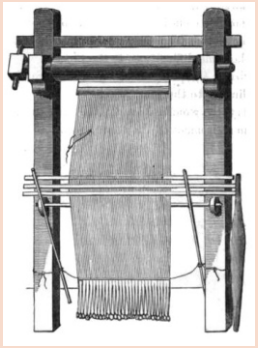


Yarn on its own has limited uses. However, if it is woven together to become cloth then it becomes more useful and valuable. The threads which run downwards are called warp threads, while the ones which run crosswise are called weft threads (right).



In order to make cloth, a tool called a loom is necessary. A loom holds the threads tight while they are being woven together. One of the earliest looms was probably the kind known as a warp-weighted loom. With these looms the warp threads are suspended from a branch or piece of wood and each has a weight attached (some just a stone) so that they are held taut (left). The weft threads would be pushed into place by hand or a stick. This stick later became a device called a shuttle.



In many early societies the production of cloth was considered a woman's job. This was the case in ancient Greek society. A good weaver made a good wife. In Homer's *Odyssey* Penelope, the wife of Odysseus, who hoped that her husband would return alive from Troy, spends each day weaving and unweaving a piece of cloth to delay having to choose a new husband. Looms are often shown on ancient Greek vases (right).

In order to push the stick/shuttle holding the weft threads through the warp threads another stick, called a shed stick, was pushed between alternating warp threads to separate them. This allowed the weft thread or shuttle to pass through the entire warp at once.



Looms gradually became more complex. In the sixteenth century a typical loom looked like the machine shown on the right. The warp threads were often separated in complex ways in order to make complicated patterns (bottom right). In England at this date, looms like this were expensive and weaving was usually a job for a male craftsmen. Reading was an important centre of cloth weaving. The father of Archbishop Laud (1573-1645) was a weaver, who had his workshop in Broad Street.



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The loom in this box is called a backstrap loom. It is believed to come from Chota, a town in the region of Cajamarca (right) in northern Peru.

Backstrap looms are another form of ancient loom. Instead of tying the warp threads to a branch and weighing them down with a stone, the threads are tied around the weaver's waist at one end and around a stationary object such as a tree, post, or door at the other. They are kept taut simply by leaning back. Backstrap looms are easily moveable, since they can simply be rolled up and used almost anywhere.

The photographs below show backstrap looms being used in various regions of Peru - and some of the colourful products being sold.







Backstrap looms are used in other South American countries, such as Guatamala and Equador. Although they are relatively simple, a skilled weaver can make complex and colourful designs.

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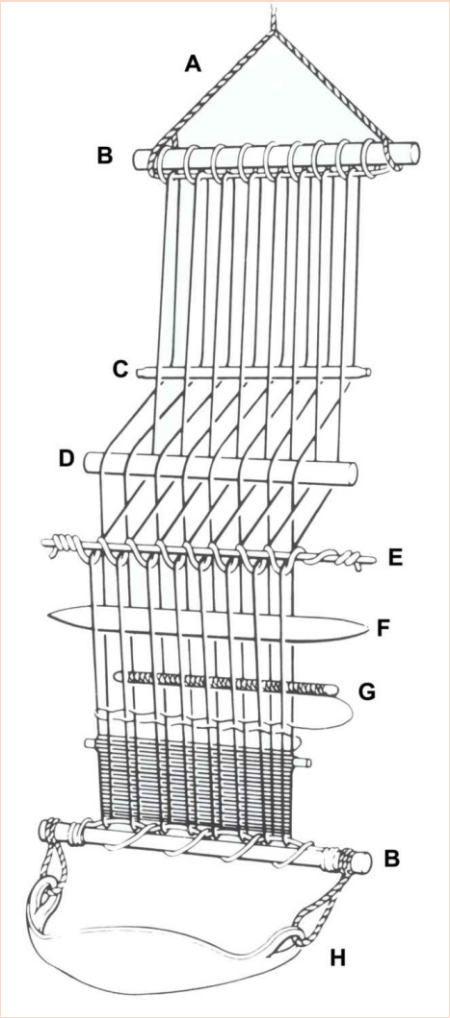

The diagram on the left shows the structure of a typical backstrap loom.

A - A cord or rope is used to tie the loom to a tree or post.

B - End bars are used to hold the warp threads to the upper and lower ends of the loom.

C and D - Shed rods. These rods open up the alternating warp threads.

E This is called the heddle rod. The weaver manipulates this to move the warp threads backwards and forwards.

F - This batten helps to separate alternate warp threads to allow the shuttle (G) to pass through them. The batten can also be used to tighten the weft threads as they are woven.

G - The shuttle, containing the thread of the weft, passes from side to side between the warp.

H - This belt is worn around the weaver's back and connects her/him to the loom. The weaver controls the tension on the warp threads by leaning backward or forward.

Backstrap looms are not only used in South America. They are common in many areas of China and south-east Asia. The photograph on the right shows a lady from Indonesia using one.

