

WEAVING

Weaving can be like painting with yarn, working with color and fabric at once. As color takes over, the woven work comes to be. With fiber, texture, structure, and technique, the motion binds the process of weaving. Whether handspun, natural or synthetic, fibers are chosen and measured for the warp length and width.

Weaving is a craft in which fiber strands are interlocked to make cloth or objects. Looking at the tapestry weaving- a technique using discontinuous weft to make different coloured blocks of pattern.



Weaving is done on loom. **Loom** a frame or related base for weaving cloth.

The threads attached to the loom are known as **warp** threads

The threads pulled across the warp are **weft** threads

The weft are passed over and under the warp threads to lock the two sets of fibers together



Winding threads
on the warping board



on the

Removing the threads by chaining them for portability

The warp is spread and looped around the lease stick for "beaming on" to the loom. The lease stick is pulled around the beam by a hand crank. Warp threads are threaded through heddles and then through a reed used for beating.

Beaming onto the back beam or wrapping onto the back beam



Threading through the heddles

Threads inserted in the reed



The **weft** is the fiber which passes through an open shed and across the warp by shuttle. The shed is open and closed by the lifting of harnesses.

Shuttle with bobbin wrapped with weft threads





Foot treadles operates the harnesses to go up or down.

Harnesses are lifted by the treadles they are tied to and by how they are threaded to create patterns. Handlooms can have 4 to 24 harnesses. As the warp shed is closed, the beater pulls the weft thread into place.

Harnesses rise which lifts threads and gives a "shed" for the shuttle to pass through



The beater places the weft in position

The way the warp and filling threads interlace with each other is called the weave. The majority of woven products are created with one of three basic weaves: plain weave, satin weave, or twill.

Woven cloth can be plain (in one colour or a simple pattern), or can be woven in decorative or artistic designs, including tapestries.

Tapestry is a weaving technique that indicates a pictorial design incorporating methods of joining areas of colour and textures.

Fabric in which the warp and/or weft is tie-dyed before weaving is called ikat.

Weaving is a textile craft in which two distinct sets of yarns or threads are interlaced to form a fabric or cloth. The threads which run lengthways are called the **warp** and the threads which run across from side to side are the **weft or filling**.

Weaving is a method of fabric production in which two separate sets of yarns or threads are interlaced at right angles to form a fabric or cloth. The other methods in weaving are knitting, lace making, felting, and braiding or plaiting.

The longitudinal threads are called the **warp** and the lateral threads are the **weft** or filling. (*Weft* or *woof* is an old English word meaning "that which is woven".) The method in which these threads are inter-woven affects the characteristics of the cloth.

Cloth is usually woven on a **loom**, a device that holds the warp threads in place while filling threads are woven through them. A fabric band which meets this definition of cloth (warp threads with a weft thread winding between) can also be made using other methods, including tablet weaving, back-strap, or other techniques without looms.

Note: Weaving is a process used to create fabric by interlacing threads. Weft threads are laced over and under and run horizontally to warp thread. By working the warp and weft threads at right angles, a weaver can create fabric materials like cloth, carpets or tapestries.

Weaving terms

In order to begin this skill, it is helpful to master a basic weaving vocabulary. The construction of all fiber products is expressed in the following weaving terms.

1. **Warp** – the threads are the skeleton or framework of the fabric. They are stretched up and down the loom whether the loom is made of cardboard or wood.

In choosing the warp threads, remember to choose a yarn that does not have much stretch. Also test it for strength. Ordinary cotton string or linen thread is fine for warping as it does not much stretch.

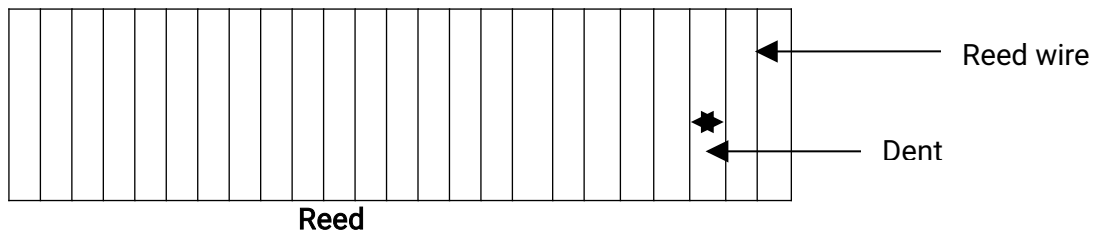
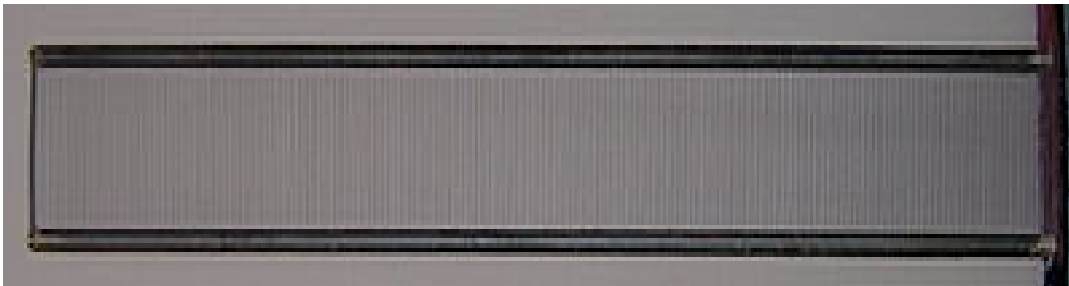
Warp: A series of tight thread stretching lengthwise on a loom through which the weft is woven

2. The **Weft** threads are the ones that cross over and under and are woven into the warp threads. At times they are also called woof or filling. **Weft:** In weaving, thread or other fiber-like materials that are woven across the warp from side to side



3. **Shuttle** – the device that carries the yarn over and under the warp is the shuttle. Fingers are used on small looms. Large-eyed needles (weaving needles) with yarn wrapped around it.

4. A **reed** is part of a weaving loom, and resembles a comb. It is used to separate and space the warp threads, to guide the shuttle's motion across the loom, and to push the weft threads into place. The reed is securely held by the beater, and consists of a frame with many vertical slits.



5. **Dent**

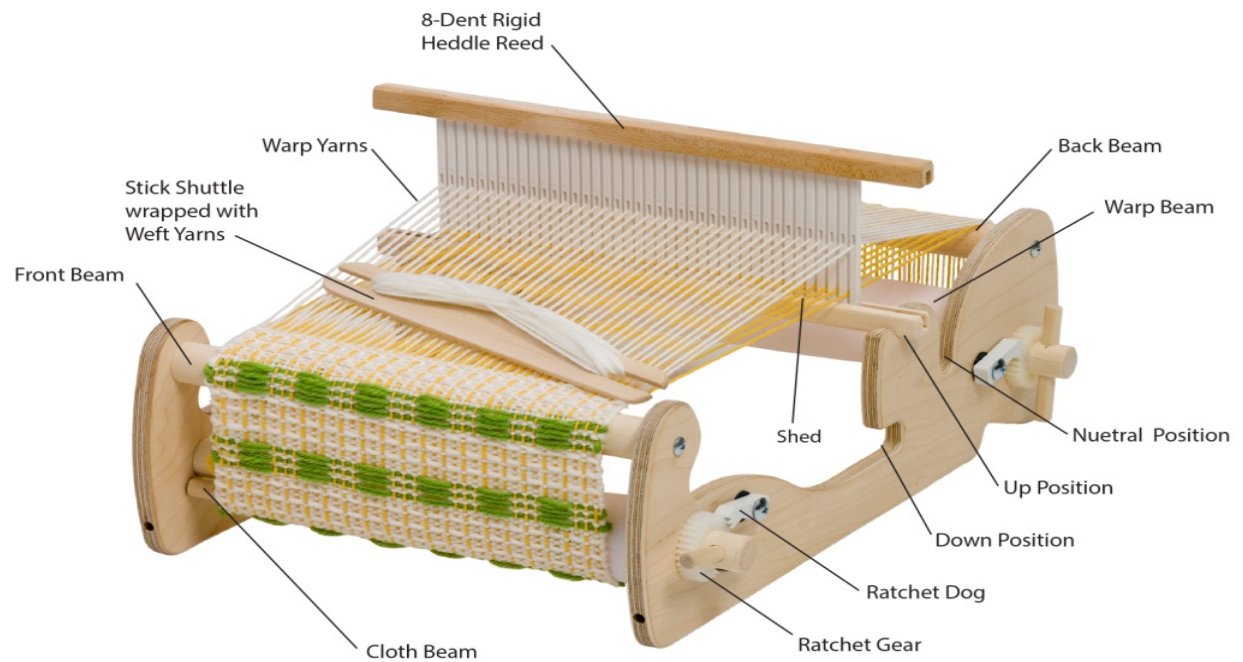


The gaps
between
reed wires
are Dents

A reed on end

Both the wires and the slots in the reed are known as dents (namely, teeth). The warp threads pass through the dents after going through the heddles and before becoming woven cloth. The number of dents per inch indicates the number of gaps in the reed per linear width. The number of warp thread ends by weaving width determines the fineness of the cloth. One or more warp threads may pass through each dent. The number of warp threads that go through each dent depends on the warp and the desired characteristics of the final fabric.

6. Shed sticks help to lift the alternating warps through which the shuttle is passed. A ruler, dowel or flat piece of cardboard will act as a good shed stick. The shed is the opening created.
7. The **Heddle** is a loop device that, like the holes in the Popsicle stick loom, raises and lowers the warp threads.
8. A **Beater** is used to push the woven thread into place. One can use fingers, forks or large comb as a beater.
9. Eye.....



Types of looms

Basketry

Basketry, art and craft of making interwoven objects usually containers from flexible vegetable fibers such as twigs, grasses, bamboo and rushes or from plastic or other synthetic materials.

Basket weaving is the process of weaving or sewing pliable materials into two or three dimensional artifacts such as mats or containers.

Basketry is the craft of making objects by weaving or coiling together materials. The resulting objects are called baskets.

Basketry is an ancient craft. It's been done by people around the world for thousands of years, enabling them to use available natural materials to make vessels for storage and for hauling water, or for use as other household goods, like furniture. Some people have even made houses using basketry techniques.

Many baskets are made with variations on the process of weaving. **Weaving** is the intertwining or interlacing of strands of material to make a whole object, like a piece of fabric or a basket. The strands run in two directions, the **warp**, or lengthwise vertical strands, and the **weft**, or horizontal strands.

Basketry Materials

Basketry uses many materials. Traditional basketry relies on natural materials, including young twigs from trees and shrubs like willow, plant roots, grape or honeysuckle vines, and a wide variety of grasses.

Baskets have also been made from **canes**, which are long flat strips formed from the fibrous cores of plants like palms and **reeds**, which are specific types of broad-leafed grasses.

Some baskets are also made from **rattan**, thin strips of materials that come from a thorny climbing palm.

Today, baskets are also woven from a wide variety of synthetic materials, like plastics and recycled materials made into pliable fibers.

Baskets come in endless varieties of patterns, and many have wonderful decorative designs on their surfaces. We can't discuss all the specific weave patterns, but now let's review several basic techniques.

Basketry Techniques

There are four basic techniques for making baskets. Three of them involve warp and weft threads, and often the thicker, ridge warp pieces serve as ribs or supports for the shape of the basket. In most cases, any natural materials are soaked in water to make them more pliable and easier to work with during the weaving process.

1. **Coil basketry** can be as simple or as ornate as you like. Techniques vary quite a lot between cultures, and according to material choice. This is simple kind which doesn't take too long to make and can be made at home or out in the woods.

The coiled structure is so tight these baskets are ideal for gathering, processing and storing seeds and berries.

With the coiling technique you can make baskets of many shapes; vase shaped, bottle shaped, or wide bowl shaped.

2. "Plaiting" basketry using materials that are wide and ribbon-like, such as palms
3. **Twining basket weaving**

Twined weaving refers to using multiple materials, one that is more rigid for the base and another two that are more flexible for the sides of the basket.

"Twining" basketry using materials from roots and tree bark. Twining actually refers to a weaving technique where two or more flexible weaving elements ("weavers") cross each other as they weave through the stiffer radial spokes.

Twining is one of the major basketry construction methods. It is a weave done with two elements woven simultaneously around the spokes. The weaving elements (weavers) cross between the spokes for a half turn or in some instances for a full turn. You should be careful to maintain the orientation of the crossing weavers so that the twist remains consistent.

4. "Wicker" and "Splint" basketry using reed, cane

The basket weaving process:

The parts of a basket are the base, the side walls, and the rim. A basket may also have a lid, handle, or embellishments.

Most baskets begin with a base. The base can either be woven with reed or wooden. A wooden base can come in many shapes to make a wide variety of shapes of baskets.

The 'static' pieces of the work are laid down first. In a round basket they are referred to as 'spokes'; in other shapes they are called 'stakes' or 'staves'. Then the 'weavers' are used to fill in the sides of a basket.

A wide variety of patterns can be made by changing the size, color, or by placement of a certain style of weave. To achieve a multi-coloured effect, aboriginal artists first dye the twine and then weave the twines together in elaborate fashions.

Steps to make a basket

1. Start by understanding some basic terms:
Weaver - these are the basket strands that weave through the spokes; they are lighter, thinner and more flexible than the spokes, to enable them to be woven in and out;
Spoke - these are the strands that stand upright and form the side supports of the basket; they are much stiffer than the weavers and are strong.
2. Be familiar with under-and-over-weaving. This is the most commonly used technique. It is also the simplest. The illustration indicates its form.
3. Note that double weaving is the same form but two weavers are used at once. This is an effective weave on large surfaces, and in bands or patterns of the same or a contrasting colour on plain rattan baskets.

4. Note that pairing may be used with an odd or even number of spokes. Two weavers are started behind two succeeding spokes, and crossed between them, so that what was the under weaver becomes the upper weaver each time.

5. Identify the triple twist. Here, three weavers are placed behind three consecutive spokes, starting with the back one, over two and under one spoke, each on its way to the back of the third spoke being laid over the other two weavers. In turning up the sides of large baskets where separate spokes or additional spokes have been inserted, or as a strong top for scrap baskets, this weave is invaluable.

COILED BASKET MAKING

To start the basket take a small handful of hay and make the end into a piece of cord so that you have an eye through which you can thread your binding material

Begin to wrap the strip of bark around the core of hay for a few centimeters.

Gradually encourage this sausage of material to begin to spiral around.

From now on every couple of wraps you make with your binding material, take the end and thread it under and around the previous layer of the coil. If you have trouble threading between the layers you can use an awl to separate the fibers.

With a fairly tough binding material, bark can point the end with your knife to make it easier to thread between the layers. For a softer binding material such as string I like to whittle a large wooden needle and use this for threading.

You will need to keep adding hay into your fiber core to keep it an even thickness. The thickness of the coil is up to you.

When your bark strip is about to run out you can weave/ thread the end down between the coils to lock it in place. You can introduce new binding material by doing the same but outwards towards the edge.

It won't be long before your basket has grown to a usable size. You can make a basket as big or small as you like with walls as steep or gradual as necessary depending on your needs.

When you are happy with the size of your basket stop adding in as much hay and eventually stop altogether so that core of fibers tapers off.

You can make handles from various materials. A wooden handle is rigid and strong which maybe suitable for your needs. The design or use of a basket may mean that a handle is not required.

Purpose of basket

Baskets serve utilitarian as well as aesthetic **purposes**. While **baskets** are usually used for harvesting, storage and transport, specialized **baskets** are used as sieves for a variety of **purposes**, including cooking, processing seeds or grains, tossing gambling pieces, rattles, fans, fish traps, and laundry.