
MASTER WEAVER

BI-MONTHLY BULLETIN FOR HANDWEAVERS

Z-HANDICRAFTS - FULFORD - P.Q. - CANADA

May - June 1959

No. 45

THE STORY

OF THE TECHNOLOGY OF HANDWEAVING.

It is a fact that handweaving is much older than what we call history, and therefore that we have only a faint notion of how and when it started.

It is nearly certain that weaving originated independently in different parts of our globe and at very different times. Once it reaches a certain level it spreads rapidly in all directions. The result is that we cannot study the history of weaving of one geographical district without taking into account what was happening in the neighbourhood, sometimes very remote.

Thus an island in the Pacific could remain at a very primitive stage for a very long time, and then suddenly because of an invasion or new trade relations the weaving technique will improve, and the designing change. If the two civilisations brought in contact are not too widely different the influence may be mutual. Then again for centuries nothing happens, until a third civilisation in some way stronger than the first two leaves its mark permanent or transitory. And so it goes.

But it also happens that from time to time we find very primitive civilisations which apparently were never influenced by anything. Thus the first white explorers in Australia found aborigines who did not yet invent the spindle - thus the two races were separated culturally by some ten or twenty thousand years!

This highly accidental pattern of development explains why even at the beginning of this century we could find nearly all stages of weaving in one country or another.

If we wanted to describe the history of weaving in all inhabited parts of our globe, we could not do it in less than a number of volumes, that is if we had all the data necessary for such a tremendous work, which we have not.

What we can do however is to follow the growth of a fictitious, yet average civilisation; and this is what we shall do.

What comes first: spinning, weaving, sewing, basketry, or mat plaiting? It seems obvious to us that spinning must precede weaving, because if we have no yarn we can not weave. But this is not necessarily true. We might as well say that there is no sewing unless we have the thread. But again this is false.

Probably the oldest crafts of this class are: sewing and basketry. Which of them is the oldest depends on location. Sewing with animal sinews could be done anywhere from the poles to the equator. Basketry only in places with higher vegetation (willows, rushes). But surely mat plaiting should develop parallel to basketry.

Thus sewing was if not the first, the most universal craft. How long ago was that, we can not even start guessing. Twenty, fifty thousand years? Then came baskets and mats, the latter as a sort of a luxury.

Mats when finished may be considered as woven, except that no weaving implements were used, and that there was hardly any difference between the warp and weft. But obviously mat-making is already the first step toward weaving.

The weaving proper starts when there is a distinction between warp and weft. The warp is stretched between two points, such as a bough, or a trunk - and the weaver's belt, or a strap at the weaver's back. Then the weft is inserted into the warp with a pick-up stick (a primitive needle). To keep the warp stretched to the proper width we have at first a raddle at the back of the warp. Then a raddle, which at the same time is a reed - closer to the weaver. The beating of the weft is done with a fiat stick.

Even now spinning does not come into the picture. There are all sorts of long vegetable fibers, and animal sinews, leather thongs, etc, which can be used for primitive weaving. In at least one instance we have weaving which uses higher techniques such as

a pile on plain ground without any trace of the knowledge of spinning.

The lease rods or at least one of them appear very early in the history of weaving, and the next development is a heddle-stick: a stick with half-heddles (doups) which can open one tabby shed, when the other shed is produced by the lease rod or rods.

The raddle in front of the heddle-stick changes slowly into the reed held in a batten.

The shuttle is a much later development. At first it was a ball of yarn which followed a picking stick. Then the yarn was wound on a flat stick with two small balls (one on each end) to prevent slipping. Then came the flat shuttle with a notch at each end. Then the yarn wound around a horizontal spindle, sort of a long bobbin. This bobbin was later on placed in a small box, and this is how our shuttle was invented.

The warp instead of being stretched between two points, was spread between two horizontal sticks, or was hung from one stick and weighted with stones etc on the other end. The stick or sticks were fixed to perpendicular supports to form a frame vertical or horizontal. Finally both horizontal components were replaced by rollers which could hold any length of warp and any length of fabric.

The later stages consisted on mechanised shedding-motion (shafts, treadles) and on ever increasing number of shafts.

This is the ideal scheme of the growth of the technology of handweaving. It probably never took place actually in the above order in any single country. In many cases it stopped either at the lowest level (point to point warp, narrow fabrics), or at the stage of a frame loom (horizontal, vertical, with or without rollers), or finally on the stage of simple foot-power loom (mostly four shaft, counterbalanced). It is remarkable that after reaching any of these levels the stagnation could last for more than ten centuries, to be followed by a very fast development always due to the influence of another civilisation. Only Asia, Europe, and quite recently North America went beyond the third stage of a simple foot-power loom. How this happened we shall see in the next instalment.
