
S H O R T C U T S

TEMPLETS OR STRETCHERS

We shall interrupt the logical sequence in which we have been describing the weaving equipment, and jump ahead to the stretchers. We are doing this because we must have a stretcher if we make experiments with Net Weaving, and good stretchers are hard to find on the market.

The origin of the name: Stretcher is obvious, because the gadget stretches the fabric. But the other name: Temple, or Templet is rather curious. "Templum" in Latin meant first a piece of land, open ground, then consecrated ground, and finally a building erected on such a ground. But it has also another meaning: a short beam used in building. Our "templet" comes obviously from the latter. The word "Temple" should be reserved for consecrated buildings, to avoid confusion. Yet in old books about weaving we find temple as often as templet, both meaning a stretcher.

The templet used in handweaving is made of two flat pieces of wood either hinged or sliding on each other. Both pieces together form a wooden lath of an adjustable length. Each end of a templet has a row of sharp needles. The more of these needles and the finer they are the better. The needles are pressed into the fabric very close to the edge, then the templet is stretched to the proper length and locked in this position.

The obvious purpose of a templet is to prevent the take-up in weft, or pulling-in of the edges (unjustly called "shrinkage"). But here immediately the question arises: why should there be such a take-up, which would require special measures? We know that if the warp is properly set, and the right kind of yarn is used, there should not be much pulling-in. This is absolutely right, and therefore the templets are or rather should be used only in exceptional cases.

A templet has the following drawbacks: it does not work in a continuous way (except in power weaving where a templet is of completely different construction), because we must set it in one place,

then weave for a few inches, and then re-set it again. Thus the fabric is stretched at an uneven rate, and the edges are wavy. This effect produced by the templet may disappear in washing and ironing, or it may not. The needles may leave holes at the edge. Finally, weaving with a templet is slower than without.

Therefore for all these reasons the templet should be avoided at all costs. Yet there are legitimate cases when we cannot do without it. They are as follows:

1-st. When for any reason whatsoever we use a very low sett of warp (light fabrics made of comparatively heavy yarn).

2-nd. When we must weave with an elastic weft on a stiff (non-elastic) warp. For instance cotton weft on linen warp.

3-rd. When because of the wide warp, and weak warp yarn, even the normal take-up is too much for the edges (woolen fabrics 40" or more with singles in warp).

4-th. When the nature of the weave itself involves an unusual amount of the take-up in weft (bound weaves). But even here, if the time element is not too important, we should rather leave the proper length of weft in each shed.

5-th. When the weft must be tightly stretched to produce the required texture of the fabric (cross weaves, net weaves). Here leaving plenty of weft in each shed would be worse than useless, because it would produce an entirely different weave (sort of Spanish Lace instead of Leno, for instance).

Most of these cases are exceptional, yet if the weaving is to be done at all, we must use templets.

Of the two kinds of templets mentioned before (sliding and hinged) the hinged type is much superior, because it stretches the fabric always to the same width, and it requires little time to move it to the next place. The only advantage of the sliding type is that it can be very finely adjusted to any width, when the hinged one works by steps of not less than $\frac{1}{2}$ ". Thus for instance if we want a width of $12\frac{1}{4}$ " we must make it either 12" or $12\frac{1}{2}$ ". A combination of both would be just perfect, but none is on the market, and the construction would not be very simple.

The hinged templet works on the following principle (fig.1). Two pieces of wood fit into each other so that they can be adjusted from the lowest length to nearly twice this amount, but never more than that. The adjusting consists on passing a bolt into one of a row of holes in one of the two pieces. This bolt is at the same time the

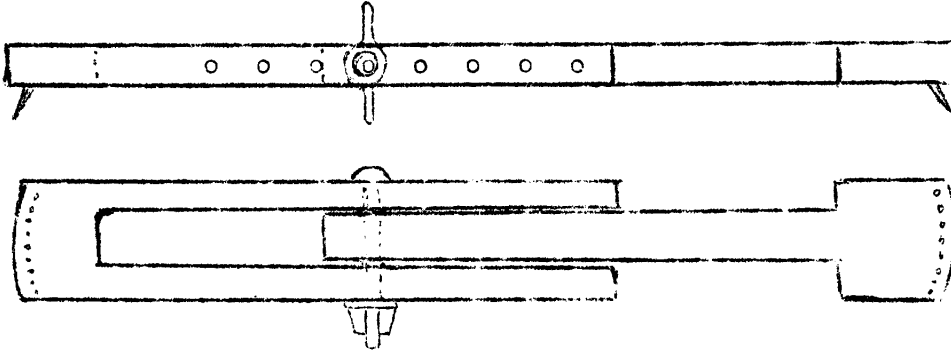


Fig.1

hinge which joins the two levers. It should have a winged nut for locking. The desired width of the fabric is chosen first, and the bolt inserted into the proper hole. Then the templet is partly folded until it fits the actual width of the fabric. The needles or points are then pushed into the edges and the templet straightened out to the full length. Now the fabric should become as wide as the warp in the reed, the bolt is locked, and the weaving can begin. After a few inches the operation must be repeated: the more often the better for the fabric.

If we do a lot of work which requires templets, we must have a set of them. For instance one templet may be used for fabrics from 12 to 18 inches wide; another from 18 to 27; a third from 27 to 40, and so on. For experiments with sample looms we may need a very small templet: from 8 to 12 inches.

A "perfect" templet could be built, but was not so far. It is an interesting problem for somebody who owns a well equipped workshop and likes experimenting. First of all the needles should be replaced with rubber-lined jaws (as a small vise) which would grip the edges. The length should be adjustable in a continuous way (sliding type), but the hinge must be retained for fast shifting the templet from one position to the next. In all such a perfect templet would be too expensive to be of any practical value.
