

Shuttle-Craft Bulletins: Weaving Pile Fabrics

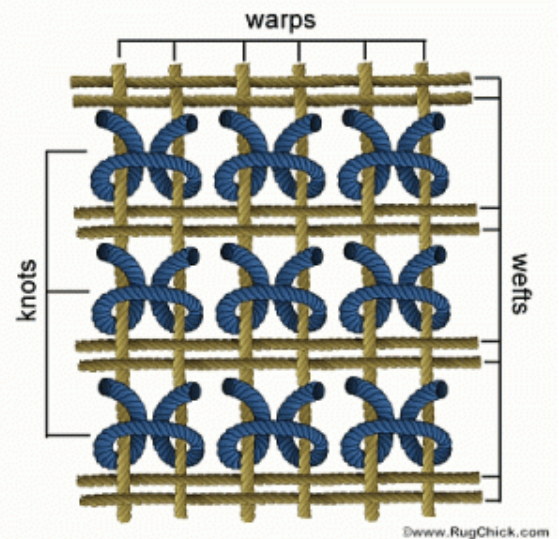
Pile fabrics as described by Mary Atwater in her March and April 1930 Shuttlecraft Bulletins. Pile weaves are ancient, probably originating in China, but she wrote that velvets and pile carpets were made elsewhere at an early date as well. Pile carpets are made on a plain weave foundation with the design tied in knot by knot, a laborious process.

Tufted weaving is done with a plain weave ground, and loops picked up from the weft between the warp threads and stabilizing them on a knitting needle, weaving 2-3 more plain weave ground, beating them firmly, then withdrawing the knitting needle, then repeating the process. Finer work may be done with wires. Loops may be cut or left whole.

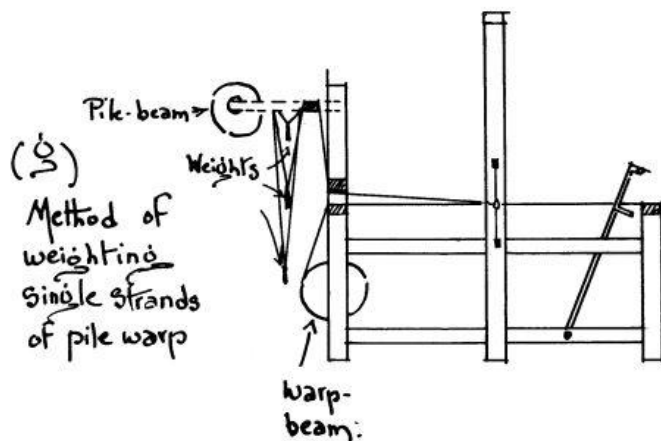
An example of loop weaving was published in 2009 by Syne Mitchell in her online publication: *Weavezine* found at this link:

<http://www.weavezine.com/content/pile-loop-wash-cloths.html> a spa cloth for exfoliating woven in aloe and hemp, woven on 2 shafts.

A photo of her weaving from the link is show here:



Mary also described a technique using 2 back beams, like a supplemental warp set up. One beam is the pile beam and the other the background warp. The pile beam break is made up of a system of weights, which keeps a gentle tension on the warp to allow the loops to be formed. This tensioning system was described by Katy Meek when she taught weaving linen here a few years ago. Tien Chiu also describes this live weight system, at this link: <https://www.tienchiu.com/2009/05/live-weight-warp-tensioning-system/>. The pile warp was 6-8 times as long as the ground warp.



In fine velvet there may be as many as 60 rows of pile to the inch. Silk velvet was traditionally woven on a cotton ground, which could be beaten very firmly.

Weaving pile with 2 harnesses allows little design; striping is about the only option. The March Bulletin included threadings for 3 and 4 harnesses, with the 4-harness threading allowing for a two-block pattern. An 8-harness threading provided for six blocks, but this would require 6 pile beams, one for each block of the pattern. Mary suggested that weighting each pile thread separately would give the most design freedom.

The April Bulletin continues the pile weaving discussion. In this issue, Mary included 3 designs for tufted weaving arranged for rugs, but they could be used in other applications as well. Detailed instructions for the 3 designs were given and they were to be woven in the weft loop method described above with some sort of rod to hold the loops in place.

Mary wrote that any graphed pattern, such as cross stitch may be woven in this manner. The Summer and Winter weave may be used on a 4 or more-harness loom with the design produced in loops or tufts over two pattern blocks. The Crackle weave may be used for tufting in a similar way, with some interesting effects. The pile may be cut or left in loops or it may be cut to different levels, with some blocks trimmed close and others left long.

Here is a fun application of loop or pile weaving from the weaving loom blog:

<http://www.theweavingloom.com/fun-with-the-pile-weave-weaving-loops/>

