

New Techniques in Summer and Winter Weave

BY MARY M. ATWATER

THE summer-and-winter weave in its classic form is probably familiar to most readers of *THE HANDICRAFTER*—if not, detailed directions may be found elsewhere (in various articles that have appeared from time to time in *THE HANDICRAFTER* and in the *Shuttle-Craft Book of American Hand-Weaving*). In this article it is proposed to describe some ways of using this interesting old weave that do not appear to have been practised by the old-time weavers.

These new techniques were developed from an experiment in weaving a summer-and-winter threading “on opposites,” using a pattern color and a background color as weft, without a tabby.

Take, for instance, the simple two-block pattern shown in Diagram No. 1 (this is pattern 159, page 218 of the *Shuttle-Craft Book*). Treadle the first block of the pattern as follows:

Treadle 1, pattern color; treadle 3, background color.

Treadle 2, pattern color; treadle 4, background color.

Repeat as required to make the first block square. Weave the second block with exactly the same succession of shots, but reverse the colors.

A fairly coarse warp should be used for this weave, set further apart than for ordinary pattern weaving. The weft should be fine in comparison to the warp, and if well beaten up the warp will be entirely covered and a heavy double-face fabric will result—alike on both sides except that the colors will be reversed. A warp of No. 5 Perle cotton set not closer than 12 ends to the inch, with weft of Shetland yarn or material of similar weight, will give the effect described.

For this weave the warp should be kept stretched tighter than for ordinary weaving and great care must be taken not to narrow in the fabric unduly. In order to have a good edge it is advisable to thread several repeats of the twill threading—1, 2, 3, 4—as a selvage on each side of the piece.

Treadle pattern (b) as follows:

First block:

Treadle 1, pattern color; treadle 3, background.

Treadle 2, pattern; treadle 4, background.

Second block:

Treadle 5, pattern; treadle 7, background.

Treadle 6, pattern; treadle 8, background.

Third block:

Treadle 3, pattern; treadle 1, background.

Treadle 4, pattern; treadle 2, background.

The pattern is made up of these three blocks.

Three colors may be used in this pattern—two pattern colors and the background—the first block being in one pattern color and the other two blocks in a different shade for the pattern shots. If two pattern colors are used, however, the effect on the wrong side will be confused and the fabric will have to be used right side up exclusively.

If desired, a tabby may be woven with this weave, and adds to the stability of the fabric though it shows very little. A tabby shot should be woven after each pair of pattern shots.

In summer-and-winter weave each block of the threading can be woven independently of the others, and this makes it possible to produce very interesting color effects in some of the more elaborate pattern—those of six or eight blocks. A different color might be used for each block if desired, though as a rule it is advisable to limit the effect to three or four colors. For instance, two different colors may be used for the figures of the pattern and a third color for the background. To weave in this manner, weave a shot of each color and then a tabby. By this method two different figures may be woven at the same time, using different colors, and interesting shaded effects are possible. If each block of the pattern is woven on a pattern shed, with the warp set quite far apart and the weft well beaten up, an effect quite like tapestry may be produced—though on one side of the fabric only. The reverse side will have a confused effect due to the overlapping of the various colors. On a warp at the normal setting the background blocks need not be woven with a pattern shot unless desired.

When weaving a pattern of six or more blocks in a variety of colors, many more sheds are used than there are treadles on any ordinary loom. Of course there is no difficulty in making any shed desired on a loom such as the *Structo No. 750*, in which each harness is controlled by a single hand-lever. To get the same freedom of operation many Scandinavian looms are built with a set of raising cords—one for each harness—that pass over pulleys to the front of the loom where they pass through a board punched with keyhole shaped slots. Each cord is provided with a bead that will pass through the hole, but not through the narrow slot. The cords controlling the harnesses to be raised are drawn down and held in position by engaging the beads in the slots. Such a contrivance could be added to any large loom at small expense.

However, I find that by making a special tie-up, as shown on Diagram No. 2, even a large loom of the “jack” type can be operated without much difficulty through the foot-treadles. It is, of course, necessary to hold down several treadles at a time to produce the various sheds desired. Some of the sheds are somewhat difficult to find with the feet, and, if one of these difficult sheds is used a good deal in the pattern being woven, a special treadle may be tied to produce it.

In making a complete tie-up on a jack loom, each treadle is ordinarily tied to either raise or sink each harness. However, as in a loom of this type the warp lies flat on the shuttle-race when the loom is at rest, the sinking ties serve merely to prevent the sunk harnesses from rising. If the harnesses are weighted the sinking ties may be omitted. Some looms are built to operate in this manner—with rising ties only. I find that even on a large loom built with a double set of lamms it is possible to omit the sinking ties on most of the treadles. Making a complete tie-up to the two tabby treadles usually weights the harnesses sufficiently to keep them down. If additional weight should be required—with

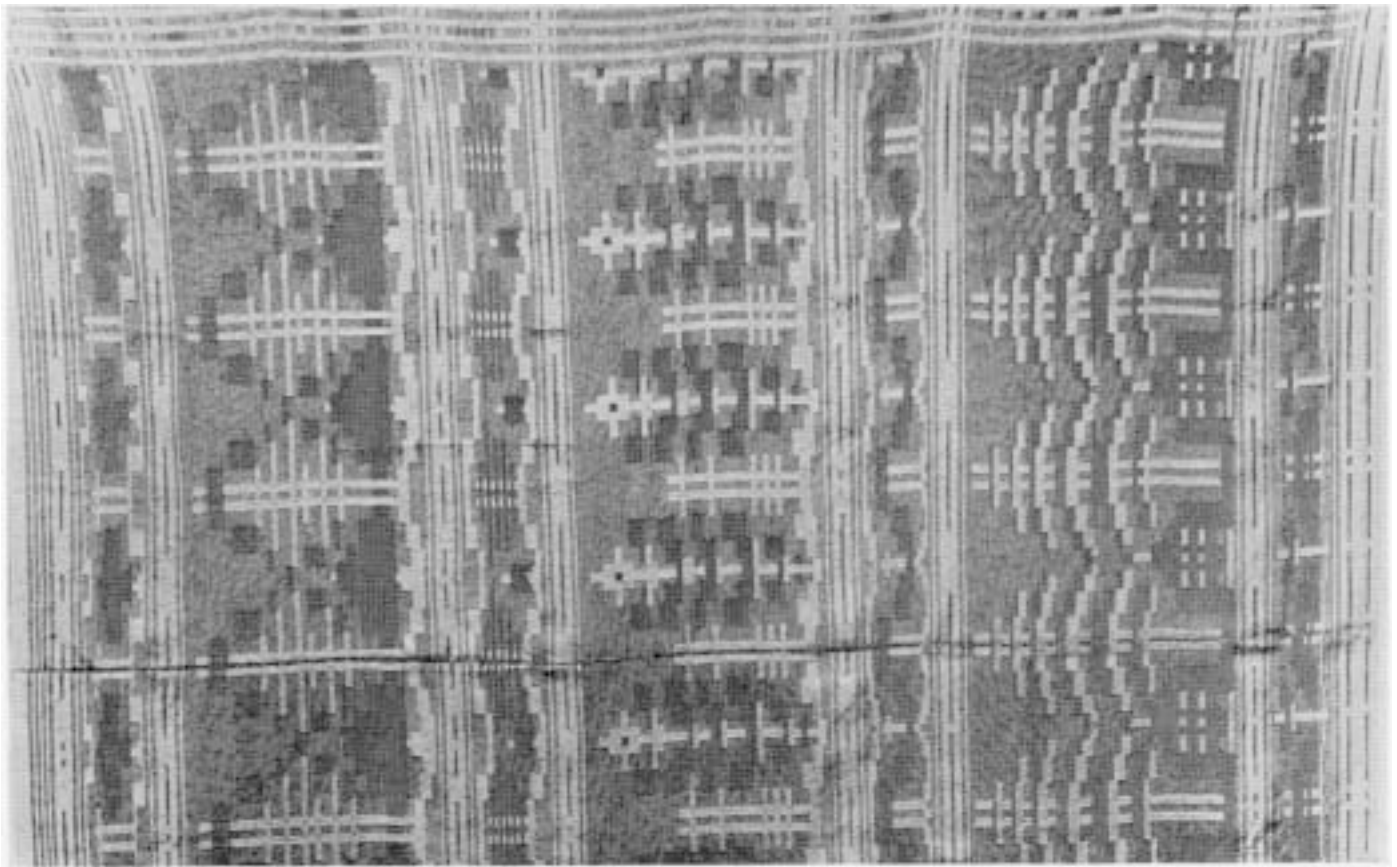


Illustration No. 1. The "Botanical Garden" Couch Cover

all the other pattern blocks by holding down treadles 4, 5, 6, and 7.

Blocks a, b, c and f, rayon, two double shots as above (treadles 6 and 7).

Blocks a, d, e and f, rayon, two double shots (treadles 4 and 5).

Blocks a and f, rayon, two double shots (treadles 4, 5, 6, 7).

Blocks c and d, wool; blocks a and f, rayon—four double shots of each. (Weave: wool shot, rayon shot, tabby, and repeat.)

Blocks c, d, e, f, wool; block a, rayon—two double shots.

Block d, wool; blocks a and f, rayon—two double shots.

Blocks d, e, f, wool; block a, rayon—four double shots.

Blocks e, f, wool; block a, rayon—two double shots.

Blocks e, f, wool; blocks a, b, rayon—two double shots.

Blocks a, b, c, wool; block f, rayon—four double shots.

Block c, wool; block a, rayon—four double shots.

Block a, rayon—four double shots.

Treadle 2, rayon—two double shots.

This completes section No. 2 of the design, and sufficiently illustrates the manner of weaving. If woven in single shots a single tabby shot should be thrown between pairs of pattern shots. The weaving may, however, be done more rapidly by using double strands of pattern weft as indicated. In this case both the A and B tabby shots should be thrown between the double shots of pattern weft. The effect is almost exactly the same as when weaving with single strands of pattern weft, as one of the tabby shots always slides under the pattern weft.

When woven as above it will be found that the background effect is different over the parts woven only in rayon from

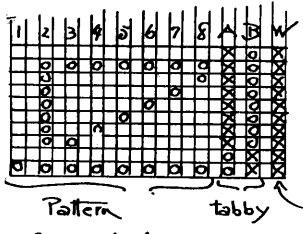
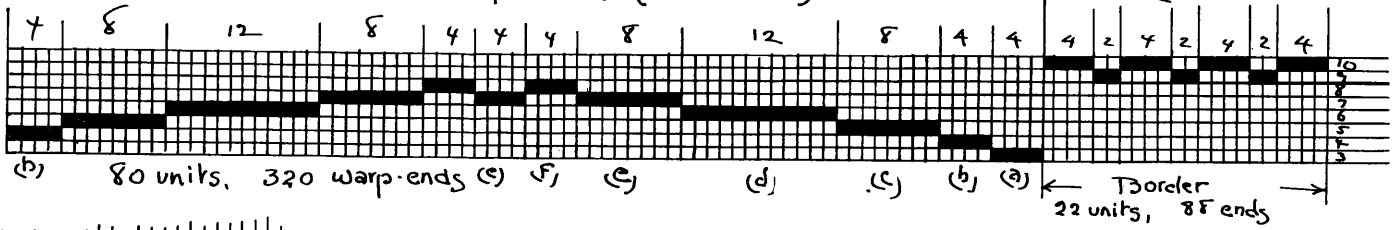
the parts woven in both colors. If this is found undesirable, tie an additional treadle to raise all the harnesses but harness No. 2—the same as treadle 2 with an additional tie to raise harness No. 10. Weave a wool shot on this treadle with all rayon shots when only rayon appears in the pattern, as in the first part of the treading as given above. This additional shot need not be used when rayon is woven for the plain stripes on treadle 1, as the ground is entirely covered.

A background color could be woven with this pattern if desired: weave the pattern blocks as indicated and weave the remaining blocks in the background color. If this is done the extra wool shots need not be woven. For instance, when weaving blocks a and f in rayon for the first line of the pattern, weave blocks b, c, d, and e in background color.

As is often the case in weaving, all this sounds far more complicated than it proves in practise on the loom.

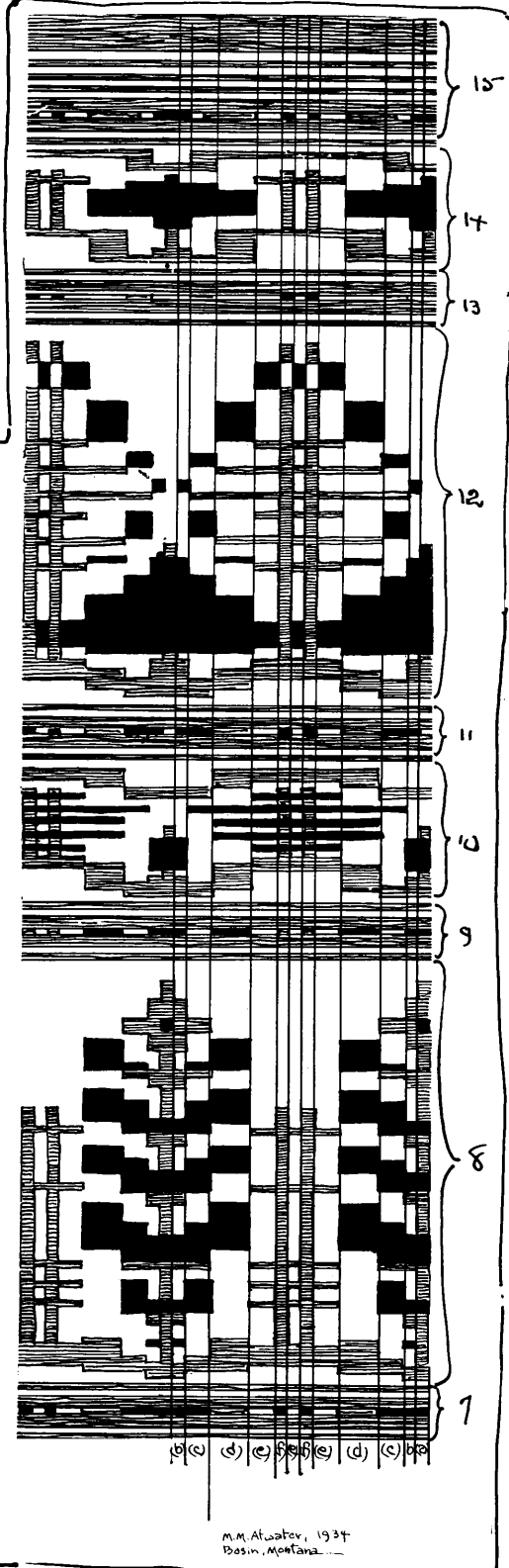
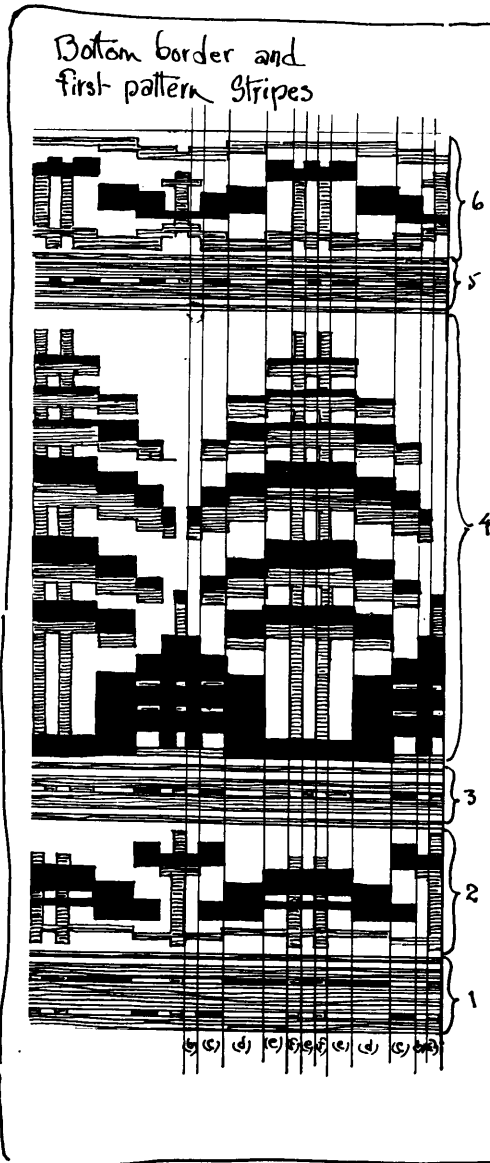
The "Botanical Garden" threading—like all simple arrangements of blocks in summer-and-winter weave—offers practically infinite possibilities for variation. It can be woven in entirely conventional "spot" patterns and symmetrical figures of the Colonial type, and in many colors. And whole forests of strange trees and rows of preposterous flowers can be produced. There are times when we enjoy following the old paths in a wholly conventional manner, and there are times when we like to give the imagination free play and produce something unlike anything ever seen before on sea or land. Weaving gives one the chance to express either mood in a nice solid fabric that will help to decorate life and make it more comfortable. There is something very satisfying about that.

"Botanical Garden" (short draft) Summer & Winter Weave



Special tie-up.
 o Raising ties
 x Sinking ties

Diagram #2 - threading and treadling of couch-cover. Parts of the design shown in solid black, woven in henna wool; shaded portions woven in gold rayon. Note the perpendicular ruling, which indicates the blocks of the pattern.



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 Boz. Mont.