

Chenille Rugs In Double Weave

by ELMER WALLACE HICKMAN

“Handsome” is the word to describe these splendid double weave rugs woven with cotton chenille yarns.

I wish that I were the originator of the idea, but I am not. I first saw mention of these eight-harness double weave chenille rugs in a “shuttle-Craft Bulletin” for November, 1934. The note read:

“Mr. E. S. Shepherd describes some unusual rugs he has been making in eight-harness double weave on carpet warp set 24 to the inch in a threading of six inch squares, with cotton chenille in two contrasting colors for weft.”

Just recently, I, after three years, carried out my urge to weave some of these rugs. The results have been so satisfying that the idea deserves the attention of our weavers. Woven with cotton chenille the surface of these thick, serviceable rugs resembles cut velvet. Rugs woven in lighter colors will serve admirably for bath mats, while those woven in darker colors would be appropriate for almost any room in the house.

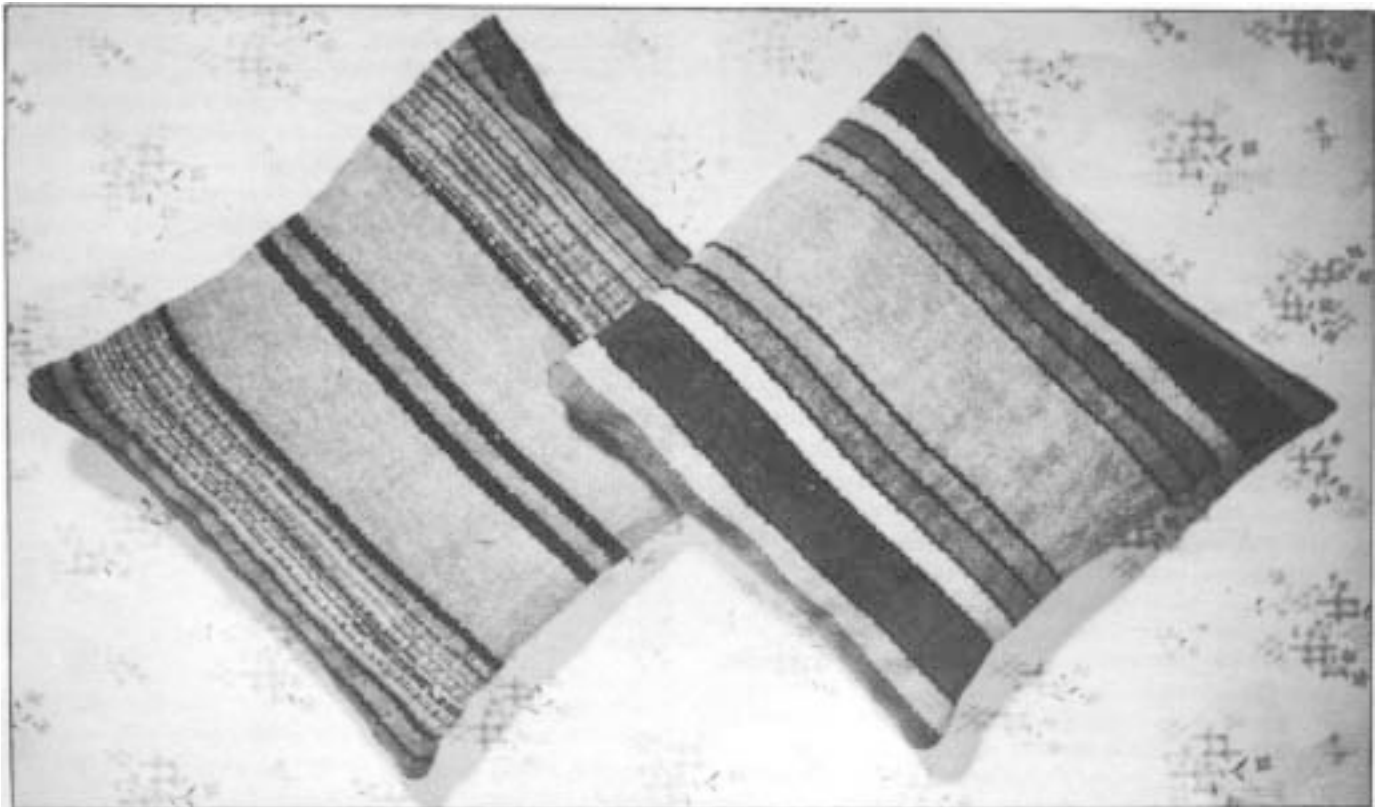
Double weaving is a fascinating aspect, as well as an astonishing one, of our weaving techniques. Too many weavers who possess an eight-harness loom overlook the possibilities of the double weave. True, one needs a great many more than eight harnesses to weave an intricate design, but even with eight harnesses one can get most gratifying results.

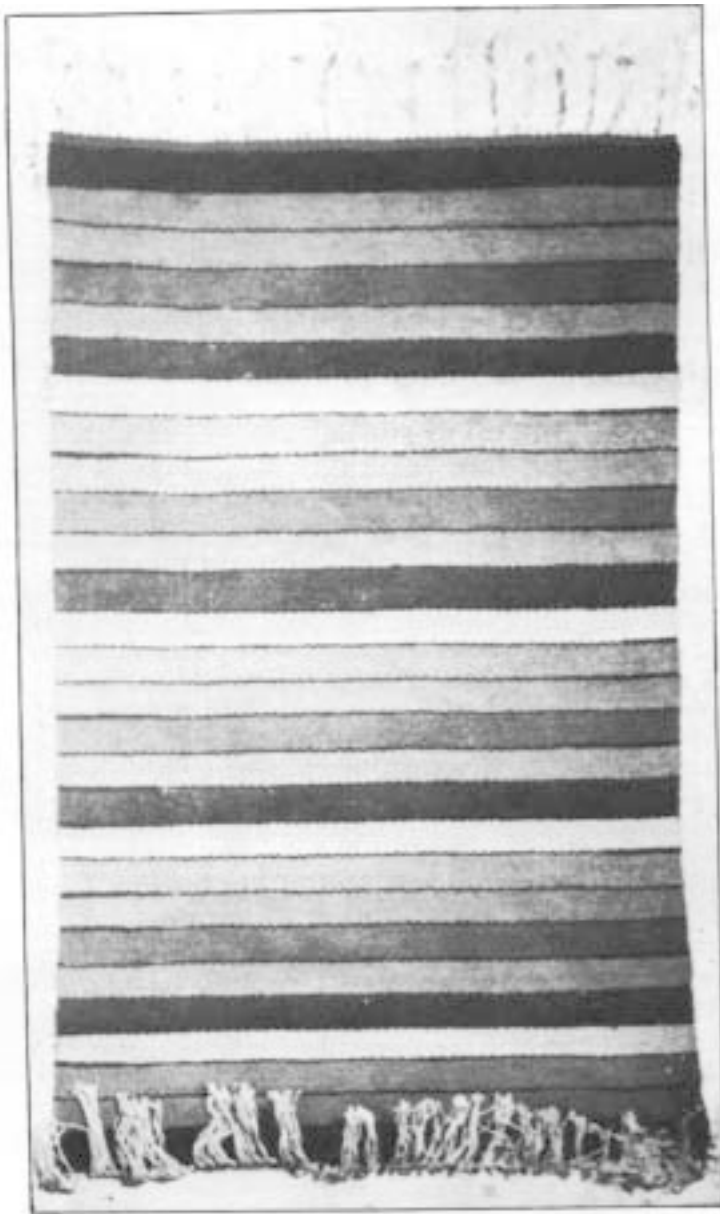
What is double weave? Lack of space forbids a complete discussion of the subject, but I shall try to give—for the sake of the uninformed—a brief resume of material found in sources such as Edward Worst’s “Foot-Power

Loom Weaving” and Luther Hooper’s “Hand-Loom Weaving.”

Plain double cloth of two colors—one color for the top fabric and the other color for the bottom fabric can be woven on a four-harness loom. When one weaves a tubular form on a four-harness loom, one really weaves a double fabric held together at the edges. The treadling for this tubular form is the treadling usually given for double weave fabrics. Figure No. 2 shows the threading and the treadling for four-harness double weave, as well as for tubular weave.

In order to weave two colors, the warp must be of two colors, alternately reeled when making the warp. If the top fabric is to be black and the bottom fabric white, then black threads and white threads must be reeled alternately into the warp chain. Arrange two spools of black threads and two spools of white threads on the spool rack so that the warp threads, a black thread and a white thread, alternate in the warp chain. The warp is then put on the loom and the heddles threaded (Figures Nos. 2, and 4) — a black warp thread through the first heddle on Harness 4; a white warp thread through the first heddle on Harness 3, etc. The result, on a four-harness loom, will be that the fourth harness carries all black threads; the third harness all white threads; the second harness all black threads, and the first harness all white threads. On an eight-harness loom, harnesses eight, six, four and two will have all black threads; harnesses seven, five, three and one will have all white threads. (Figure No. 4).





Illustracion No. 2

Two shuttles—one of white weft and the other of black—are required to weave this fabric of two separate colors.

The first shed is made by drawing down all the white threads and half of the black threads, Figure No. 2, Treadle 4, which brings down Harnesses 3 (white), 2 (black), 1 (white). You now have one-half of the black threads on top of the shed and this half corresponds to the half that might be on the top of any plain weave shed. The other half of the black threads is on the under part of the shed. All the white threads are on the bottom of the shed; but these, at this point, are not really working except at the selvages. The white threads will do their duty when the next shed is made. A black weft is put through this shed from the *right* side of the loom. This forms the black cloth on top of the weaving. Figure No. 1, a shows this step in the weaving.

The next shed is made by bringing down Harness 3. This leaves all the black threads and half of the white on top of the shed. The white threads that are on top of this shed are now really forming the "white" shed with the other half of the white threads which is on the bottom.

A white weft is passed through this shed and that weft begins to form the under fabric, or the white part of the cloth. Figure No. 1, b indicates this formation.

On the next or third shed the other half of the black threads must be used—as in plain weaving—therefore, the second half of the black threads is pulled down by Treadle 2, plus all the white threads. (This is fundamentally getting the white threads out of the way so that the cross in the warp can be made of the black threads). A black weft yarn is now put in the shed, and, of course, beaten down by the batten. Figure No. 1, c now shows two black weft yarns and one white weft put in the sheds.

On the fourth shed, Treadle 1 is pressed down. This treadle brings down the other half of the white threads (those that were not used before) and the cross in the warp is made as in plain weave. A white weft is put through the shed. Figure No. 1, d shows the two black weft shots and the two white shots.

The treadling in Figure No. 1 joins the two fabrics at the selvages only. If warp of only one color (white) were used, the resulting fabric would be a decided "salt and pepper" effect on the black surface and a plain white on the white weft surface. One must be careful of the selvages while weaving.

Besides the plain fabric on a four-harness loom, stripes can be woven—with different colors of weft—on a warp of one color. If the warp is made of more than one color, and different colors of weft are used, a plaid effect can be had. Illustration No. 1 is a striped rug made of different colors of cotton chenille weft; the warp being of one color. If one desires to have the two fabrics connected at certain points, black weft can be woven on the single plain tabby weave. This will only be plain, single weave, of course, in the fabric; but this process will hold the two fabrics more securely together. This is advisable for rugs in the four-harness double weave. The pillow tops in Illustration No. 2 are in tubular form on four-harness double weave. They are extremely serviceable, for the inside of the tubular form is equally usable as the outside, when the pillow top gets soiled.

If one understands the principle involved on the four-harness loom; that is, two different fabrics woven as they each had been woven on a two-harness loom and joined together at the selvages, then it would not be difficult to understand that double weave cloth on an eight-harness loom conforms with two pieces of cloth woven on two four-harness looms—either patterned or twill—and joined together. The joining, however, will occur only where the pattern units change to other pattern units. The large squares in Illustrations No. 3 and 4 are actually separate fabrics joined only on their four sides. The same thing exists with all the figures in the design. This does not necessarily weaken the structural qualities, but it would be well to use design units that are not too large; nor should the units be so small that, with the heavy chenille weft, the design will be indistinct.

To have a pattern—and a simple one, at that—eight harnesses must be used on the loom. The fabrics, in this case, are joined together where the pattern unit changes, or when the Group I treadling changes to Group II treadling.

On a 12-harness loom, eight harnesses are used for the pattern, and the heddles on these harnesses have the ordinary eyes; the other four harnesses are threaded for the tabby (plain twill), using long eyed (about 4 inch eyes) heddles. On such a set-up a pattern draft can be woven that would otherwise require 16 harnesses threaded after the manner of the eight-harness set-up. That is, each set of four harnesses would be threaded twill fashion, according to the draft procedure. A pattern thread—in the 12-harness set-up—as well as a tabby thread would have to be threaded through the long eyes of the heddles.

A regular 16-harness draft can be woven on a loom of 12 harnesses if the above set-up is followed. On the 16-harness loom, four sets of harnesses of 4 harnesses each, four harnesses are threaded for each pattern change. On a 12-harness loom, each set of 4 harnesses can be reduced to 2 harnesses for each pattern change (8 harnesses in all), while the remaining 4 front harnesses are used for the tabby (threaded for plain twill). The eight pattern harnesses are threaded with the pattern draft, singly through the regular eyed heddles; the four tabby harnesses are threaded for the plain weave and also one warp thread of the pattern harnesses is threaded through the long eyes of these tabby harnesses, this pattern thread being brought through the long eye with the tabby warp thread. The tabby threading is done in the same way as the threading for a plain double weave (four-harness) fabric. The long eyes of the tabby harnesses permit the pattern threads to move up and down without restraint.

If only the eight pattern harnesses were used, the design would be woven but would be joined only where the black warp threads met the white warp threads, and vice versa.

Designs similar to Damask patterns can be woven with eight harnesses—but only the simplest of these designs. However, these drafts are adequately suited to the rug weaving about which this article is concerned.

A condensed form of a draft for double weave is shown at Figure No. 3; the expanded draft is at Figure No. 5. The tie-up and treadling draft at Figure No. 4 shows the eight harnesses divided into two sets or groups. Group I is used to weave one block of the design; Group II weaves the reversal of that block. This, for instance, occurs on the upper side of the double woven fabric. Furthermore, the underside of the double woven fabric will have these designs of the upperside fabric also reversed.

Through experimenting with the different colors, possible threadings, treadlings, etc., I made the following notes that may prove helpful:

In starting the first weft shot, put the end back in the same shed which the first weft shot was put in—wrapping the end around the selvage threads of the upper group of warp. The upper set is weaving the upper surface of the rug. In starting the second weft, put the end in the same shed; but wrap it around the selvage of the lower set of warp threads. This under surface and upper surface are really two different or separate rugs which are joined together in the process of weaving.

Write out the threading on a card, using two colors of pencils to designate alternate rows, as “8-4-3-1” in black, and “8-7-6-3” in red. Associate your two colors of weft

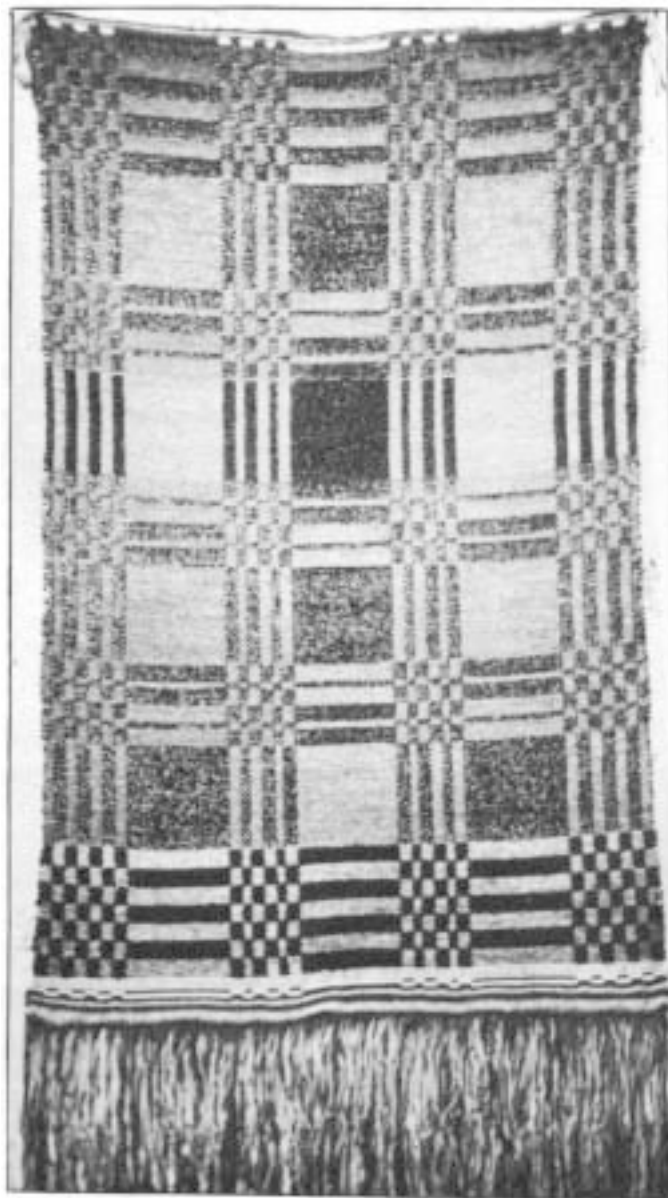


Illustration No. 3

with these two colors and this will save a great deal of annoyance with the shuttles.

The weft yarns at the selvages must be twisted around each other so that the edges will be closed. Automatically, this is accomplished in this way: Shuttle No. 1 is put in from the right side of the loom and let lie nearest the reed (Group I is being treadled); Shuttle No. 2 is put in from the left side of the loom and let lie in back of the other shuttle, nearest the weaver. When Group II is treadled, reverse the order of placing the shuttles while they are at rest.

The rug from which Illustration No. 3 was taken was woven on a ten-harness Structo loom. I found that inadvisable—the heavy work about wrecked the loom. If a table loom is used the treadling need not be transposed as is the usual custom. Your pattern changes will simply be reversed, that is all.

Winding the chenille into balls from the skein and placed in a container, such as a metal waste basket, will make the winding onto the shuttles easier.

If the colors chosen for the weft are red and white (those were the colors used in the rug of Illustration No. 4) a warp of alternating red threads and white threads would be appropriate. The red threads will be but slightly noticeable in the red weft design units and the white warp in the white weft units of the design. The effect of this is such that the surface resembles solid blocks of cut velvet. Only one color of warp need be used, if desired; but the color of the warp—unless carefully chosen—may blemish the weft yarn colors, causing a good looking weft yarn to become hideous.

Warp: Since the rug is really two rugs, twice as many warp threads are necessary as for a single rug. Instead of the usual 12 carpet warp threads to the inch, 24 threads to the inch must be reeled into the warp chain.

Weft: A good quality of cotton chenille (such as Bernat's chenille) should be used for the weft material. The tufts of some cotton chenille are so skimpy that the yarn looks moth eaten—therefore, choose a good yarn. Chenille about $\frac{1}{8}$ of an inch in thickness is the right size.

Reed: A 12 dent reed sleyed double—one white and one red, if two colors of warp are employed. The warp is threaded singly through the heddles.

Explanations of the illustrations: Illustration No. 1—the pillow tops were woven in tubular form with stripes of different colors of the cotton chenille for weft. The warp was $\frac{24}{3}$ cotton, sleyed 30 to the inch in a No. 15 reed. These were woven on a 20 inch table loom of four-harness. Illustration No. 2 has been mentioned above. Illustration No. 3 was woven with the carpet warp set-up as given. Draft No. 1 was the threading and treading. In weaving this rug I warped red carpet warp and white carpet warp—24 threads to the inch—12 threads of each color. I made the warp originally for bath mats to be woven in red chenille and white chenille. I experimented with other color combinations first—result, the rug in Illustration No. 3. I found that on any weft color, except white weft, the white warp cheapened the color of the weft. Therefore, I would advise using any other color in the warp rather than white—unless white weft is used in the weaving. Since the chenille only partly covers the warp, it would be well if only one color of warp is used, to employ the color of warp nearest your main weft color scheme. That is, if your color scheme is composed of two values of green (a tint and a shade, or a light and a dark) use a green warp; if two values of blue, use blue warp.

The combinations of colors carried out in the rug in Illustration No. 3 were: two values of green; two values of blue; garnet and old rose, and black and vermilion. Black and vermilion made too garish a combination. Any

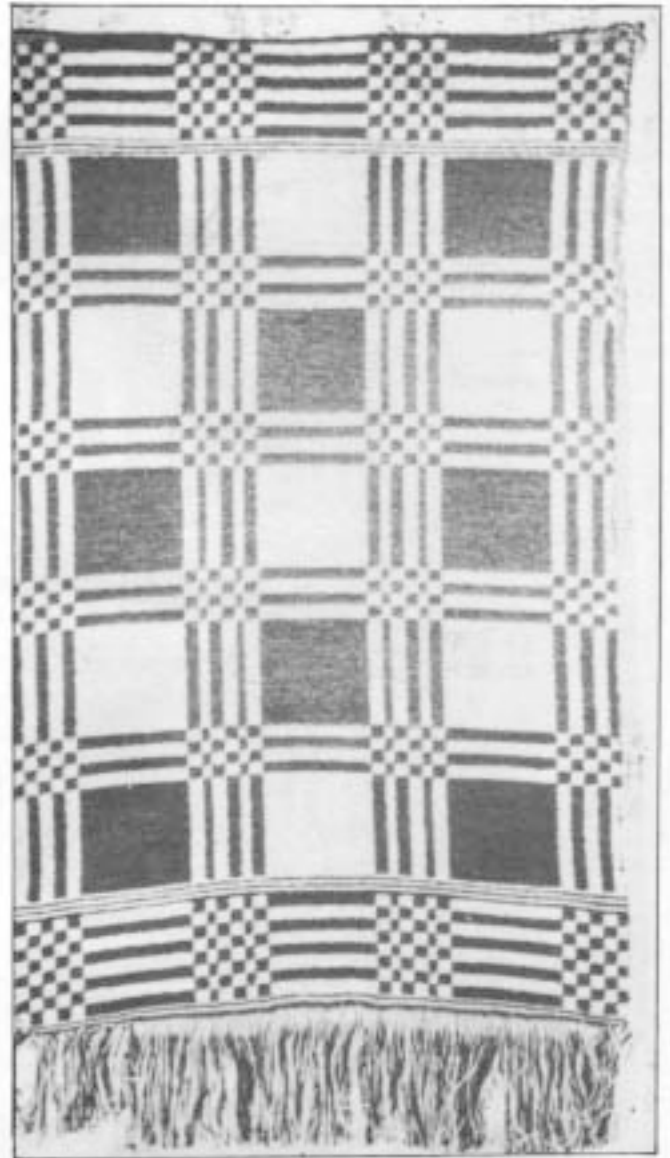


Illustration No. 4

of the other combinations proved extremely satisfying. When warp is similar in color to the weft combinations, the warp shows less and, consequently, enriches the fabric. Illustration No. 4 is a combination of red warp and weft and white warp and weft, using Draft No. 1 for the threading with the two units omitted from each side border.

Several drafts are given which should serve as excellent threadings for these rugs.