"Twice Woven" Rugs

by MARY M. ATWATER

"Twice-Woven" rugs are good-looking and durable. They are simple to make, and waste materials and odds and ends of left-over yarns can be used in their production. Why don't we make more of them? That is a question I am unable to answer. Apparently the technique is little known among American handweavers.

It is undoubtedly an ancient technique, and has gone over into commercial weaving. It is said to be a Scandinavian technique, but I do not find it described in any of the Scandinavian books—or anywhere else, for that matter. As far as I know, this is the first description of the process—as practised by hand-weavers—that has appeared in print, except some notes on the subject recently published in the Shuttle-Craft Guild Bulletin.

Rags may be used for this form of rug-making. Rags cut from knit fabrics are especially good, and fairly light-weight fabrics are better for the purpose than heavy fabrics. The rags need not be sewed but weave better if folded or rolled. Wool rug-yarns, however, make a handsomer rug, with much the texture of knotted pile fabrics at far less cost in time and trouble. The cut yarns in short lengths obtainable from mills at low cost can be used in this type of weaving, and any left-over odds and ends of yarn may be used, though if the materials are very fine they should be woven in strands of several ends. Cotton chenille is not practical for these rugs and cotton roving is undesirable because of its extreme coarseness and its tendency to flake off. Candle-wicking cottons may be used to better advantage than roving.

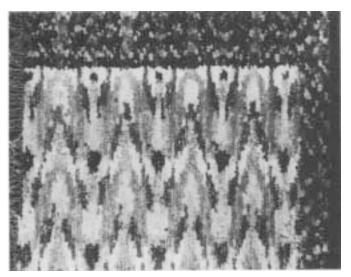
Patterns, as elaborate as one chooses, may be produced in this technique, and as the weave is plain tabby a very firm and durable rug is produced.

Rugs of this order are literally woven twice—once to produce the weft material and once to produce the rug.

For first-weaving make a warp of ordinary carpet-warp thread, at a setting of 8 ends to the inch. Thread as for plain tabby, on two harnesses. Sley as follows: (using a 12-dent reed) four threads through the first dent; skip five dents; four threads through the seventh dent; skip five dents, and so on. The warp will be in four-thread groups, set at half-inch intervals. Do the first-weaving on this warp, beating as firmly as possible. When a sufficient yardage has been woven, cut the fabric lengthwise between the groups of warp-threads. The resulting chenille-like strips are the material used for the second weaving.

For the second weaving make a warp as for an ordinary rug—carpet-warp at 12 ends to the inch is suggested. Thread as for plain tabby weave and sley in the ordinary manner. In weaving the rug alternate shots of carpet warp and the first-woven material may be used, or the weaving may be done entirely in the first-woven material. I recommend the use of the alternate shots of warp-thread as it seems to me to make the more durable rug.

The yardage of first-weaving required for a given rug depends on the linear yardage of first-woven material that will be needed for a rug of the size desired. Allowing four weft shots to the inch, which is correct for most materials, a rug 36" wide and 60" long will require 240 yards of first-woven material. It is obvious that if our warp for first-weaving consists of 24 groups of four threads each—96 ends—we shall need to make ten yards for first-weaving. If, however, we make a warp of 48 groups or 192 ends, five



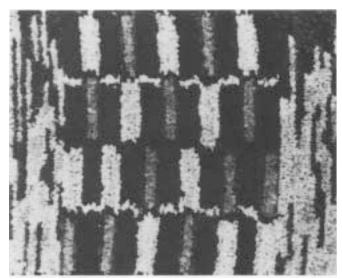
An old Twice-woven Rug in many colors.

yards of first-weaving will be sufficient. The warp for first-weaving may be as wide or narrow as we find convenient, but the yardage to be woven depends on the yardage of material required for the proposed rug. There is an advantage in making the first-weaving on a fairly narrow warp, as the strips of first-woven material will then be longer and require fewer joinings, but it is a matter of convenience. If first-woven material for several rugs is made on the first warp it saves time to make the first warp as wide as the loom will accommodate.

It is obvious that if the first-weaving is done in material all of the same color we shall have at the finish a plain-colored rug. To produce patterns in this weave the various colors must be so arranged in the first-weaving that when the material is stripped and woven into a rug the colors will come together to produce the desired figure. Simple patterns are easy to make. Elaborate patterns are entirely possible but require a bit of careful figuring to bring out the desired affect.

Suppose, for instance, we wish to make a rug with a plain center, in a light color, with a dark border all around: suppose that for the 36" x 60" rug we are considering we want end-borders 10" deep and 6" borders on each side. The end borders will require 80 yards in solid dark color. If for our first-weaving we have a 24" warp of 48 groups of warpends, a yard and three quarters woven in solid dark color will give us a bit more than the required yardage. The strips of dark color will, however, be only a yard and three quarters long and will require frequent joining. If we prefer, we can set aside 16 groups of warp-ends and weave these in solid dark color for five yards, weaving the rest of the groups in the color-arrangement required for the body of the rug. It is not necessary to carry the weft all across the fabric as the fabric will be cut apart later in any event. The weaving for the body of the rug should be done as follows: 6" dark (for the beginning); then: 24" in the light color, 12" in the dark color, and repeat: 24" light, 12" dark and so on for the required yardage.

The strips may be joined by tieing the wrap-ends together. This is better than merely overlapping them as an



Twice-woven samples.

overlap may make the pattern come out uneven.

When a number of colors in odds and ends of material are to be used they should be sorted into two groups—light and dark—and may then be woven in "hit and miss" fashion, the dark yarns for the border and the light yarns for the center. Some very attractive effects result from weaving in this simple manner.

Illustration No. 1 shows part of an old twice-woven rug done in rags. The warp for first-weaving for this piece was set somewhat closer than as recommended above,—a group of four warp-threads to each 3/8" in the reed. The manner of sleying through an 8-dent reed, would be four threads to the first dent, skip two dents, and so on. Or, through a 15-dent reed—which would be better—four threads through the first dent, skip five dents, and so on. The border is woven in a hit-and-miss mixture of dark colors,—black, brown, dark grey, dark green, dark blue and dark red. The figure has a light background in shades of tan and light blue, and the lines of the figure are in a mixture of the dark colors, chiefly red.

In this piece of weaving only the first-woven material is used for weft and the alternating shot of warp-yarn is not used.

Illustration No. 2 shows a small experimental piece done in rags, also, but more coarsely cut and not as firmly beaten as the piece in illustration No. 1.

The following suggestions for several simple pattern effects for twice-woven rugs may prove useful: (a) 36" rug with dark borders as described and with the center in checker-board squares. Weave material for plain end-borders as described, and for the body of the rug weave as follows: 12" border; 6" dark, 6" light, 6" dark, 6" light, 12" border; 6" light, 6" dark, 6" light, 6" dark Repeat for the required yardage. In weaving the rug, weave twenty-four shots—or the number of shots required to make the first set of blocks square. Then break off and start over at the opposite edge to reverse the colors, and weave till the second row of blocks is square. Reverse again, and continue in this manner till the center of the rug is as long as desired.

The dark and light squares need not be in solid color, but may be woven in a variety of dark or light shades in hit-and-miss fashion as explained above.

(b) A 36" rug with a border all around, and the center

in broad lengthwise stripes in four colors can be made this way: border 12"; 6" color (1), 6" color (2), 6" color (3), 6" color 4; 12" border; 6" color 4, 6" color 3, 6" color (2), 6" color (1), Repeat as required.

If desired, these wide stripes may be separated by narrow stripes in black, or in color like the border. To produce this effect weave the last shot of each color-band and the first shot of the next in the dark color.

(c) For an effect of diagonal stripes for the center of the rug weave as follows: 6" border; 3" color (1), 3" color (2), 3" color (3), 3" color (4), 3" color (1), 3" color (2), 3" color (3), 3" color (4); 12" border; 3" color (3), 3" color (2), 3" color (1), 3" color (4), 3" color (3), 3" color (2), 3" color (1), 3" color (4); 12" border; 3" color (3), 3" color (4), 3" color (1), 3" color (2), 3" color (3), 3" color (4), 3" color (1), 3" color (2); 12" border; 3" color (1), 3" color (4), 3" color (3), 3" color (2), 3" color (1), 3" color (3), 3" color (2). End, 6" border.

If this pattern is woven all one way it will produce a diagonal arrangement. If after eight shots, you break off and reverse the colors by starting from the other side, a zig-zag effect similar to the old piece shown in Illustration No. 1 will be the result.

(d) Here is a simple arrangement for the center of our rug that will give an interesting effect if a variety of colors are used—say half a dozen dark shades for the dark part and as many light shades for the light part. Weave 12" border; 8" light; 12" dark; 4" light, for the first yard. For the second yard: 12" border; 10" light; 12" dark; 2" light. For the third yard: 7" light; 14" dark; 3" light. And so on, varying the arrangement in each yard but starting always with light, dark in the center, and a narrower band of light at the end, making the space always 24" between the 12" border stripes.

To make crosswise stripes of solid color weave 24" in plain color between the border stripes.

Elaborate figures of flower-forms, ships, fish, trees, and so on, may be produced in this technique by laying out carefully the color arrangements for the first weaving. These figures, however, smack of the commercial when too complicated and exactly executed. For the hand-weaver the simpler patterns are probably more suitable. As the pattern is entirely in the arrangement of the colors in the first-weaving, in doing the second weaving to produce the rug the weaver needs merely to be careful to keep the edges of the border and the pattern figures even and true.

The directions as given are all based on a 36" rug with six-inch side borders. If a rug of different width is to be made, or if wider or narrower borders are desired, the calculations for first-weaving must, of course, be modified accordingly. A 24" rug without side-borders can be made by following the directions as given, simply omitting the "12" border" direction each time it occurs.

The "twice-woven" technique is not advised for anything except rugs, though possibly if done in quite fine materials it might be used for foot-stool tops. The fabric, even if fine materials are used, is too coarse and heavy for bags or similar pieces. Rug-weavers, though, will find it an interesting variation from ordinary practice. There is nothing much more stupid to make, or more uninteresting to possess than the ordinary "hit and miss" rag rug. By the "twice-woven" process materials that seem unsuited to anything but hit and miss weaving can be converted into really-handsome pieces, and though a little more time and trouble are involved, the time is well-spent and the trouble is interesting.