Patterns in Chenille.

Here we must keep in mind that, when weaving the chenille weft any combination of colours in the vertical direction - will become the same combination of colours in the horizontal direction during the second weaving. Therefore if we could weave only one strand of chenille weft at a time, we could produce any pattern whatsoever. This of course is not very practical, although it could be done, and it would be still faster than making a knotted rug. Fortunately naturalistic ornaments are out of fashion, and the geometrical ones are much more suitable for our purposes.

The proper way to weave a chenille rug with geometrical pattern is to prepare a large number of short strips of weft instead of long, continuous ones. The length of each piece of weft is equal to the width of the rug.

Let us take a very simple example of a rug, or rather of a sample about 6 by 8 inches (fig. 1). Each mark on the pattern represents \( \frac{1}{4} \)" square. Thus if we have 4 picks of the chenille weft per inch, each line in the pattern corresponds to one pick of weft.

What do we need to make this sample? First: 8 picks of weft which will have white ("d") pile on 4 inches of its length and 2 inches of black ("m") pile (A-B).

Second: 8 picks - 3" white, and 3" Black (B-C).

Third: 8 picks - 2" white, 4" black (C-D).

Fourth: 8 picks - 4\( \frac{1}{2} \)" black, 1\( \frac{1}{2} \)" white.

Since there are 3 picks of weft of each kind, we shall figure out our first warp so as to have 10 groups of warp ends (the first and last being useless). They will be set at a distance twice the length of the pile. If the pile is supposed to be one half of an inch high, then the distance between two "cores" will be one inch or a little more. Using a reed No. 14 we shall have 8 ends in one dent, and then skip 1\( \frac{1}{2} \) or better 1\( \frac{3}{4} \) ends.

We start weaving with about one inch of "heading". This one inch will be used later to turn in the ends of each piece of weft. Any odd piece of yarn can be used here, since it is going to be ripped off after the cutting. Then come 4" of white pile weft, and 2" of black. Then again 1" of heading or rather spacing. Leave a mark in a different colour here to guide the cutting. This will give us enough weft for the first part (from A to B) of our sample. Then again one inch of spacing, 3" of white pile weft, and 3" of black, plus 1" of spacing. This is the second part of the rug from B to C. The third part will be: 1" spacing, 2" white, 4" black, 1" spacing. The fourth
1" spacing, 4½" black, 1½" white, 1" spacing. This is all.

Now we take the chenille weft off the loom. Cut it first in the vertical direction. We shall have 8 strands of weft about 24" long each. Now we cut each length of weft on the colour marks between spacings. We shall have 32 short pieces of chenille weft in all. Remove gently the filling at each end of every piece of weft. Twist together the free ends of warp (moisten them if necessary) to prevent the pile weft from unravelling. Now we are ready to weave the sample.

First we arrange the weft in the order in which it will be needed on a small table or an extra bench close at hand. We wind also a bobbin of black weft (darker of the two colours, but always a neutral one if more colours are used) for binder.

If we decided on twisting the pile weft into round chenille (C, fig.2 MW No.19 page 5) no further preparations are necessary. If we shall use flat weft (A, fig.2, and fig.7 in the same issue) we shall need a flat stick longer than the width of the rug as described previously but with a sharp notch in one end (fig.2). We take the first piece of weft, and insert the twisted end (core) in the notch, so that it will be firmly held. Now we flatten the weft on the side of the stick, and hold it in the right hand the thumb pressing the free end of the weft to the stick. We put the stick with the weft into the open shed from the right hand side and adjust it so that only the twisted ends without pile will project on both sides of the shed. Now we beat through the stick (warp at low tension), disengage the core from the notch and gently remove the stick from the shed. Then we beat again and change the shed when the beater is still in its forward position.

A few shots of binder follow. How many depends on how thick the pile is supposed to be. When weaving the binder it is very important to leave enough weft in the shed so that the edges won't be pulled in. Here the whole take-up is on the weft - none on the warp, and unless we are careful the rug will get narrower than the proposed width, which may distort the pattern.

When opening the next shed for the pile weft, before we make the second pick of chenille weft we must tuck in both ends of the first pick. This is the main purpose of the free pieces of core left at each end of the weft in the first weaving. Without these ends, or if we clipped them after weaving at the edge, hardly anything would hold the pile, and it would pull out near the edges later on.

Thus one repeat of weaving has the following stages:
1-st. Open the proper shed.
2-nd. Take the next piece of weft, insert its end into the notch in the stick, and flatten it out.
3-rd. Put the stick and the weft in the shed.
4-th. Beat through the stick.
5-th. Remove the end from the notch, and the stick from the shed.
6-th. Beat again and change the shed.
7-th. Make a few shots of the binder.
8-th. Tuck the free ends of the chenille weft into the next shed.
If the rug is rather wide we can use the stick even with round chenille weft. The only changes then are: in stage 2 we do not stretch the weft flat on the stick, but after securing its end in the notch, we twist the other end until the weft is reasonably round. Then the stage 4 is not necessary at all. It may be remarked here that the twisting of the weft makes it shorter, therefore the pieces of weft must be made slightly longer in the first weaving. On no account should one stretch a twisted weft back to its original length - it will behave like an elastic and pull in the edges.

When we attempt more complicated patterns, the only difference is in planning the first warp. The remaining operations are always the same. Let us take as another example a rug on fig. 3. Here one square of the draft corresponds to one inch square, and the rug will have 16 by 21 inches. It has seven different "blocks" of pattern: A to B, B to C, C to D, etc. Each of them is made of 12 picks of weft (4 picks per inch in the second weaving are planned). Consequently our first warp may have 14 groups (12 + 2 for the edges). It will be about 13" wide (for ½" pile) and 140" long (7 times 18+2). But we may notice that the first block (A-B) is really the same as the 2-th (C-D) only reversed; then these two blocks can be woven together. Also block 2 (B-C) is the same as 6 (F-G), and 3 (C-D) the same as 5 (E-F). Only the central part (D-E) has no counterpart.

In such a case we have an alternative of weaving 24 strands of weft at a time instead of 12 - an obvious economy in time. It is true that we shall have to make block No.4 double, and use only half of it. The leftovers can be used for experiments, amusements etc. If we decide on this latter method, the plan for the first weaving will be as follows: Warp - 26 strands (the first and the last may contain only 4 ends of coarser warp) 25" wide. Length: 80" plus wastage as usual. If "r" is red, "w" - white, and "m" - black, then the order of colours in the first warp will be: 6" red, 6" white, 6" black, 2" space, 4" red, 6" white, 6" black, 2" white, 2" space, 2" red, 6" white, 6" black, 4" white, 2" space, 6" white, 6" black, 5" white.

It is obvious from the above examples that when planning a pattern we should have our blocks either of the same width, or as multiples of the same width, as in fig. 4. Here block No.2 is twice as wide as 3 or 4. No.1 is used twice, but then if we decided on weaving all blocks of the same size as 1 or 2, there would be too much waste on 3 and 4. Consequently we shall weave all blocks as 3 or 4, but we shall repeat (weave twice) No.1 and 2. In this way there will be no waste at all.

Are diagonals possible? Yes, provided that in one block they all go in the same
direction, as in fig. 5. Instead of making every pick of weft with a different sequence of colours, we make all of them the same but several inches longer than the width of the rug. In our case if one square on the draft is one inch, the weft must be woven: 6" white, 6" black, and 7" white. In the second weaving we start with the first pick exactly fitting the left hand edge of the rug, and then shifting the next one about ¼" to the left, and so on, until the last one is reached when it should come even with the right hand edge of the rug. The projecting ends are stripped of the pile, after the binder is woven but before the next shot of the pile weft, then cut to about 1" from the edge and tucked in as usual.

The Locked Wefts technique (p. 4, page 7) is an excellent method of weaving chenille rugs. Here it is better to use commercial chenille weft. Home made chenille does not slide very easily when interlocking. And in any case here we need only one solid colour on each side.

The best results are obtained with rather fine chenille. We wind it on ordinary bobbins, but if we can get larger shuttles it is so much the better, since the weft will last longer. Flat shuttles are of little use. The bobbins on the rack can be standard warping ones. Here we cannot hope to weave as fast as with plain, more slippery yarns. To keep the edges straight we must help the weft from the rack to unwind by pulling it with the left hand, and the shifting of the interlocking point cannot be done by pulling on the shuttle alone. The right hand edge must be straightened with fingers to prevent too much of pulling in. This obviously slows down the weaving, but on the other hand the size of the weft makes it so much faster, that all in all this is about the easiest way of producing pattern rugs, or for that matter — any pile fabric.

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FROM THE CLASSICS.

"The Linen Manufacturer" by Alexander Poddie, Glasgow 1822.

The Art of Weaving is of very ancient origin: the many fabulous stories concerning it, such as the story of Penelope's web; and also the frequent mention of it in the sacred writings, clearly show, that the making of cloth from thread of wool, flax, flax, flax, silk &c. is a very ancient invention. Like other arts, it has undergone an infinite variety of changes, and, consequently, improvements as to the preparation of the material and modes of operation followed by the artist. No person can ever practically be employed in all the branches of it; and, although each part bears strong analogy to the rest, yet a knowledge of the various parts can only be obtained by minute investigation, experience and reflection.

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