SLIP STICK WEAVING.

Weaving by means of shed sticks which slip by each other, is an interesting form of pattern weaving that offers a most fascinating field for experiment to the weaver who enjoys working out her own patterns. And it requires only the simplest kind of a loom, the only requirement being a loom with long heddle eyes, so that the shed sticks which are placed at the back of the loom can raise the different groups of threads to form the pattern shed without any interference. The eyes of the heddles should be at least an inch long. Warp your loom and set it up in the usual way. If you have only a two harness loom, thread first one harness and then the other, and sley through the reed. Then you are ready to insert the pattern sticks.

On page 3, three different pattern drafts are given. The S on the draft means to skip over, and the X means pick up on the pattern stick. Let us take draft No. 2, and describe the method in detail. This draft has a repeat of 23 threads, and the center of the draft is on the 13th thread. Plan to repeat this threading draft on the width of your warp so that this thread will come in the center of your warp, in order that the pattern will balance on each side of the center. With a flat pick up stick, I use black ones which are most convenient to use on white threads, start at the beginning of the draft, and proceed as follows for one repeat,—Skip over 2 threads, pick up 2, skip 1, pick up 7, skip 1, pick up 7, skip 1, pick up 2,—repeat this all across the width of the warp. This is stick No. 1, push it toward the front of the loom. Then take pick up stick No. 2, and reading on the second line of the draft, pick up the second row as follows,—skip 2, pick up 2, skip 2, pick up 5, skip 3, pick up 5, skip 2, pick up 2,—repeat this all across the warp. Then take stick No. 3,—skip 2, pick up 2, skip 3, pick up 3, skip 5, pick up 3, skip 3, pick up 2,—repeat this third row all across the warp, with the fourth pick up stick,—skip 2, pick up 2, skip 4, pick up 1, skip 7, pick up 1, skip 4, pick up 2,—and so on all across the width of the warp. Now you will find that any one of these pick up sticks will slip by each other, if they do not, you have made a mistake in picking up your threads, and should check carefully and correct this. Turn each stick, one at a time, on its edge, and insert another stick in the shed thus made, back of the heddles. It is very important to see that you get this back stick in the right shed, and it is advisable to mark each one in some way so that you can tell them apart as you weave. A tag on each one, with 1, 2, 3, and 4, is a good way to do. If you have a portable loom, it is best to tie these sticks to the edge of the loom so they cannot slip out, and cause you to lose the shed.

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You are now ready for the actual weaving. Do several rows of the plain weave for a hem if desired. On Page 3 at the right is a drawing showing some of the simple borders possible with this kind of weaving. Starting at the top, reading down, 1-3x means to turn stick one on its edge, and in this shed in front of the reed throw one shot of pattern weft, beat up, turn the stick down, and throw a shot of the plain weft or binder, then turn stick one on its edge again, and throw another shot of the pattern weft, then turn stick one down and throw a shot of the alternate plain weave, repeat the same thing once more to make 3 times. Each row of pattern weft is followed by a shot of the plain weave, just as in any regular over-shot weaving. Following down the order of the figures from top to bottom, you will see spaces between the borders, these are just a few shots of plain weave, and may be omitted if desired. Many different possibilities lie in this very simple weaving, and the weaver desirous of creating unusual fabrics has a splendid opportunity in this interesting form of weaving.

The sticks may be used in any order which pleases the weaver, and of course with the addition of color, many different effects can be achieved. Try shading from dark to light, either on the same pattern shed stick, or on successive ones. Also try weaving with two or more shades of a color on the same shuttle. Then you can also pick up just parts of the pattern shed, and not carry the pattern weft all the way across the loom. This is a very effective thing to do, especially for bags, and a great deal of variety can be obtained in this way too.

If you use draft No. 1 on page 3, plan to use fairly fine material, and set it at about 24 or 30 threads to the inch. If you look at the draft you will see that the pattern picks up on stick one, fifteen threads, which makes a very long skip if the warp is not set fine in the reed. This draft was used for a very effective luncheon set recently. Warp was unbleached linen set at 24 threads to the inch, and weft was white linen the same size as the warp. The border exactly as shown in the drawing of draft No. 1 was used on each side.

At draft No. 3 on page 3, you will see that 5 shed sticks are used. The addition of more shed sticks adds to the variety of the pattern sheds and of course does also increase the pattern possibilities. This pattern can be woven in a great many different ways, only a few of which are shown in the drawing of pattern draft No. 3, at the top left of page 3. With the use of more than four shed sticks, it is also possible to work out patterns with very large repeats of different sized skips. In planning out new patterns, the only thing you have to remember is that once a thread is skipped over, it must be skipped for the rest of the pattern above it. Or in other words, if a thread is an S on the first pick up stick, it must be an S on all of the pick up sticks which follow it, namely also on 2, 3, 4 etc. If this is not done, the sticks will not slip by each other so that the pattern sheds can be made easily. Another thing which is also a limitation of this kind of weaving, is that care must be taken not to have the skips or the pick ups of too great a number of threads, or the weft threads will pass over too many warp threads, and make too long an over shot either on the right or the wrong side. This is all right if the wrong side of the fabric will not be very much in evidence as in a bag or pillow top, or patterns with long skips can be used where the warp is set fine in the reed. If these things are kept in mind, it is very easy to devise other pattern drafts. And for those who have only a two harness loom to work with, this method will offer an unusual variety of interesting weaving, and a method of doing pattern weaving on a two harness loom. The graphic representation of these pattern drafts is one of my own devising, and they make it much easier not only to draw out the pattern on cross section paper, but also to use to pick up the pattern on the pick up sticks.

If you wish to use these patterns on a loom with short heddle eyes, the pattern can be picked up on the pick up sticks as described above, but instead of using shed sticks back of the harnesses, it would be better to tie in heddle rods, and secure them on a small frame at the front of the loom just back of the reed. The method of tying in a heddle rod was given in the June News Letter under the directions for the setting up of a picture frame loom. A diagram of the method of attaching the frame to the front of the loom is described in the leaflet, "Simple Draw Loom Weaving on a Four Harness Loom", and will not be repeated here. This may be had for 1.50 if desired.

Pattern drafts for Slip Stick Weaving.

Drawing showing the woven effect of Draft No. 3.

No. I.  One repeat
       17 threads
       4

  X X X X X X X X X X X X X X X X X X X X X
  X X X X X X X X X X X X X X X X X X X X X
  X X X X X X X X X X X X X X X X X X X X X
       3
       2

No. II. One repeat
       23 threads
       4

  X X X X X X X X X X X X X X X X X X X X X
  X X X X X X X X X X X X X X X X X X X X X
       3
       2

No. III. One repeat
       19 threads
       5

  X X X X X X X X X X X X X X X X X X X X X
  X X X X X X X X X X X X X X X X X X X X X
       3
       2

Drawing showing the woven effect of some of the combinations by using four shed sticks on draft No. 2. Many more are possible. The breaks in the drawing indicate the places where just the plain tabby weaving is used to separate the borders.