"Swivel" is an intriguing technique with infinite potentials. A durable fabric, consisting of a pattern in tabby texture, is found suitable to modern textile design. The pattern blocks are developed independently of one another, and appear as colored tabby blocks on the upper surface of the cloth. Drafts are written with every other note on Harness 1 alternating with a single harness of the weaver's choice, such as H.2. The block then becomes Hs.1,2,1,2, etc. for the length desired, and forms a block of color for the extent of the block when woven. When you depress H.2 and weave with color, you get color in tabby across this block, and you bind it by depressing H.1 alone.

Likewise you can write a block on H.3, Hs.1,3,1,3, etc., and one on H.4, Hs. 1,4, 1,4, etc. and weave in the same manner. When one block is being woven the pattern thread floats on the wrong side in back of all the other blocks. Although this makes a fabric with only one side useful, there are a great many cases where the wrong side does not appear anyway, such as upholstery, pillows, footstool covers, lined drapes, book covers, etc. Furthermore, the wrong side can be made not only useful but interesting for certain textural effects by clipping the floats about 1/8 in. from the firmly woven block.

If you wish to weave color over two blocks at the same time, you weave H.2 alone, first color, then H.3 alone, second color, which gives you two definite color blocks side by side, a thing that is not possible in most of our weaves. One can also split the tabby on Hs.2,3,4, and weave one of the harnesses as color, such as H.2, then follow it with the other two harnesses in background tabby such as Hs.3,4, always closing with H.1. If you weave H.3, color, follow with Hs.2 & 4, tabby, then H.1 tabby. Or if you weave H.4 color, follow with Hs.2 & 3 tabby, then H.1 tabby. This gives a closely bound texture with blocks showing a good bit of color.

Two-Block Swivel

The above description applies to what is known as "Basic Swivel" with blocks on three harnesses, Hs.2,3 and 4. There is also a form of Swivel consisting of only two blocks, on Hs.2 and 3. In this case H.4 is reserved for an accenting colored warp to be used to outline the design blocks. You can either include them or omit them, or first one method then the other, making interesting effects.

Design Potentials

The blocks of Swivel appear in square or rectangular form and these can be developed as color squares contrasting to the tabby background color, or they can be outlined and woven in the same color as the background, or a different color. One can also weave each block or unit alone, Figure I, A, or two blocks together, making different design effects, Fig.1, 5-7. One can also use one color for the block on H.2 and another color for the block on H.3, with a third color for that on H.4, Figure I. Nos. 8 & 10...

Adapting Other Techniques to Swivel

Other types of patterns can be woven as Swivel,—Overshot and Summer and Winter,—and the basic Swivel threading is really Spot Bronson, but with the blocks enlarged so that this too can be woven as Swivel. All in all "Swivel" is a find for the weaver of today because of the interesting effects possible with the color units. There are of course floats on the wrong side in all of these adaptations, but one can easily adapt the technique to many uses.

Drafting a Swivel Pattern

Notice the basic Swivel Weave. You can make the blocks on Hs.2, 3 and 4 any size and combine them in any way. It is a good idea to make a check paper diagram, profile-fashion, as shown in Figure I, A', E'.

If using only a two-block pattern, adapt the 4th harness to outlines, by simply adding warp notes, as at B. When one sley's the accent warps on H.4, simply sley with the preceding plain warp, or if two-per-dent,—with the two preceding. Other drafts in profile form are shown at C'and D', under the enlarged draft.

Examples of Woven Drafts

In Figure I, left side, there are ten examples of the design effects of some of the drafts at A,B,C,D, developed into fabric. At 1, only one block of Draft A is shown repeated against a plain-weave background. Or this block on H.3, (see profile guide, 2) may be used against a solid color of the remaining blocks woven in succession, H.2, & 4.

At 2 is the profile of A' reduced. At 3, the profile woven as—drawn—in, Block 1 on H.2, then B1.2 on H.3, and B1.3 on H.4. The pattern is reversed to complete the design. At 4, the reverse is woven first. See harnesses numbered at the right of each design.
DRAFTS AND DESIGNS FOR SWIVEL

Basic Swivel, A

Two-block Swivel, B

Two-block Swivel, C

Two-block Swivel, D

Directions for weaving, on P.3.

Note: In all drafts, A, B, C, D, follow numbers under each group of 4 warps for repeat times. All four drafts contain 240 threads each. Heavy circled notes on H.4 are an accenting color.

* C-1, Color 1; C 2, Color 2.
TIE-UPS

Tie-up, Jack Counterbalanced

Trs. 12 3 4 5 6 7 A B Trs. 12 3 4 5 6 7 A B

The tie-up given here is the complete tie-up for both Basic Swivel and Two-block Swivel. While a Jack loom is always convenient for weaving patterns in which we have three harnesses treadled against one, such as we have in Swivel with tabby on Hs. 2,3,4 against H.1, it is perfectly possible to use a counterbalanced loom of wide shed. When treadling any one harness alone, simply lay the palm of the hand on top of the three harnesses that rise to make them even. This clears the shed and gives it its full width. The 3-against-1 combination does not occur all the time, and one can do this weave on a counterbalanced loom with very little extra effort.

Basic Swivel. Figure I, A,A'.

In Basic Swivel there are three blocks, that on Hs. 1-2; on Hs. 1-3, and on Hs. 1-4. You will see these written in succession, Draft A. Weave the pattern "as-drawn-in", weaving each block in order as you proceed from right to left. Weave the blocks into the size desired.

When you have woven each block singly, in the draft succession, try putting two blocks together for new color effects. One of the blocks can be woven in one color, and the other block in a second color.

Weaving the Blocks Singly

See Figure I, 1, 2, 3, 4 for effects.

Block on Hs. 1-2. Follow Tie-up above.
Tr. 1 alone, color. Then Tabby A,B.
Block on Hs. 1-3.
Tr. 2 alone, color. Tabby A, B.
Block on Hs. 1-4.
Tr. 3 alone, color. Tabby A, B.

Weaving Combined Blocks

See Figure I, 5, 6, 7 for effects.

Hs. 1-2 and 1-3 Combined
Tr. 1, Color 1; Tr. 2, Color 2; then Tabby A, B, in background tone.

Hs. 1-3 and 1-4 Combined
Tr. 2 alone; C; Tr. 3 alone, C.2; Tabby, A, then B.

Hs. 1-2 and 1-4 Combined
Tr. 1 alone, C.1; Tr. 3 alone, C.2; Tabby A, then B.

Pattern Woven on a Divided Tabby

In the tabby succession, Hs. 2,3,4, together, then H.1 alone, one can use one of the harnesses of the 2,3,4 group for pattern, and follow it with the other two harnesses as tabby,—all bound by H.1, the other tabby row. Thus you can weave H.2 alone, pattern, then Hs. 3,4, tabby; and H.1 tabby. There are three possibilities:

Pattern on H.2 alone; 1st color. Tabby or a second color on Hs. 3,4. Tabby H.1.
Pattern on H.3 alone, 1st color. Tabby or a second color on Hs. 2,4. Tabby H.1.
Pattern on H.4 alone, 1st color. Tabby or a second color on Hs. 2,3. Tabby H.1.

This routine gives a very closely fabricated cloth, and if one uses pattern of a second color on the 2nd row, instead of tabby thread, the results are effective.

Two-Block Swivel. Figure I, B,C,D.

In Two-block Swivel, the pattern is put on the blocks on Hs. 1-2 and 1-3, and H.4 is used for vertical accent lines in warps of a different color or texture from the background. In this method one can both outline the blocks vertically and horizontally, making attractive texture squares or oblongs, as shown in Figure II, above right. The horizontal lines at top and bottom of the unit are in the same color as the verticals on H.4. Thread your experimental pattern to drafts B,C or D. All of these have 240 threads and are excellent to work out on a Structo 240 4-H loom weaving 8 inches wide. (See Structo adv.)

All one needs to do in weaving 2-Block Swivel is to bring the warps on H.4 to upper shed every other row if planning to include them, or keep them on lower level if not:

Verticals Included; Outlines on 4 Sides.
See Fig. II. Block on Hs. 1-2:
1st Row, Horizontal Line: Tr.1, Color; Tabby A,B.
Center of Block: Tr. 1, a 2nd Color; Tabby A; B.
Last Row, Horizontal Line: Tr. 1, Color; Tabby A,B.
(Color of 1st and last rows, same color as H.4.

Block on Hs. 1-3:
Use same directions as for H-1-2 but change Tr.1 to Tr.2 whenever used.
Weaving Summer and Winter as Swivel

Summer and Winter drafts are written in two successive or repeating blocks: Hs. 1, 3, 1, 3, and Hs. 1, 4, 2, 4. Weave the blocks "as drawn in" weaving only the pattern parts of the blocks as pattern, i.e. Hs. 3 and 4. Follow each with 2 rows tabby.

For each unit of Hs. 1-3-2-3, weave:

Pattern, H.3 alone; Tabby, Hs. 1-2; then 3-4.

Repeat these 3 rows to square the block.

For each unit, Hs. 1, 4-2-4: Pat H.4; Tab. 1-2; 3-4

Repeat these 3 rows to square the block.
A useful and attractive pattern "On Opposites" was created by Helen Daniels Young, known by many of us weavers. Mrs. Young formerly lived in Bethesda, Md., where she conducted a weaving studio. Dr. and Mrs. Young have recently moved to Mass. where they have remodeled their homestead authentically, and will continue with their craft work. Always at heart a New Englander, Mrs. Young called this conventional pattern by what it suggested,—the trim, tailored streets of a little New England town. Mrs. Young has written a very informative article on "Jaspe" Weaving" in the recent Handweaver.

"Salem Streets" like the town for which it is named, has in it a "trim" feeling. You will enjoy weaving it as a good example of a pattern "On Opposites"; and you will also find in it a useful medium for the making of mats, pillows and upholstery. Arranged with a border, it makes a good rug design.

With all these varied uses one can of course plan it with many different weights of thread. We will give two settings,—one, fine for upholstery; the other coarse for mats.

**Warp: Plan: Fine Material**

<table>
<thead>
<tr>
<th>Warp: 20-2 or 24/3 Cotton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weft: Pattern: Perle 5; or 10/3; or 20/6 Strand; or Linen 20/2</td>
</tr>
<tr>
<td>Tabby: Same as warp.</td>
</tr>
<tr>
<td>Threads per inch: 30 or 32</td>
</tr>
<tr>
<td>Width: For runner, 18 inches.</td>
</tr>
<tr>
<td>Total Threads: 578</td>
</tr>
</tbody>
</table>

**Threading Plan:**

| Selvage, - (A-B) - - - - - - - - |
| Pattern, B-C, 76 thds. Repeat 7 times - - - - - - 532 |
| Add B to D - - - - - - - - - - - - - - - - - - - 40 |
| Total Threads: 578 |

**Warp Plan: Coarse Material**

| Warp: 5/2 or 10/3 Cotton; or 20/6 |
| Weft: 3/2 Cotton or Lily's 4-strand. |
| Tabby: Same as warp. |
| Threads per inch: 20 to 24 |
| Width: As desired |
| Total Threads: -1" |

**Note:** One can also use this draft, threaded with the fine warp, and woven with fine 2-ply wool for a coverlet. Simply plan more repeats of pattern.

**Weaving Plan:**

**Border:** Hs.1-2, 2 times
Hs.3-4, 2 ".
Repeat as desired.

**Pattern:**

The pattern is composed of two block effects, one shown on draft from B to D; the other from D to C. Alternate these, Blocks 1 and 2; Add Block 1 at end, before adding border.

**Block 1:** Hs.1-2, 2 times

| "3-4, 8 " | "1-2, 2 " |
| "3-4, 8 " | "1-2, 2 " |
| "3-4, 8 " | "1-2, 8x " |
| "1-2, 2 " | "1-2, 2 " |
| "1-2, 8x " | "1-2, 8x " |

End woven pattern with Block 1, then Border, starting Hs.3-4, 2x. Hs.1-2, 2x, etc.

This draft is also excellent for Honeycomb.