Drafting: A Personal

by Philis Alvic

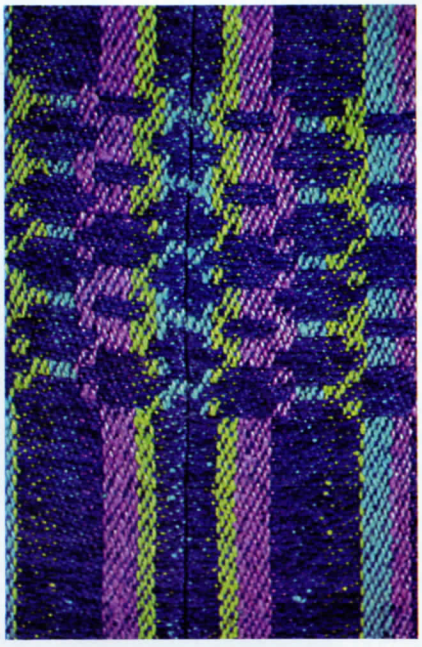
All of the examples described below are useful items. This is unusual, because almost all of my production consists of nonfunctional decorative pieces. I had thought that this was just an accident, but after further consideration, there appear to be good reasons for selecting either the twill diaper or damask in the turned block structure. The turned block structure is tight without long floats, a property that makes it suitable for items that are worn. I wove fabric for a long skirt and top in twill diaper, because I wanted a structure in which the floats in the soft silk would be unlikely to catch and pull.

A damask jacket had its origins in a design for placemats. This transition came about because I do not make samples but plunge ahead with a project, hoping my ample experience will carry me through. Sometimes a slight change of direction is needed as I realize that the fabric will not be exactly as originally conceived. But despite any miscalculations, the point I want to stress is that wear was a consideration.

The second reason for using these structures in useful items is a negative one. Fewer blocks with which to build a design is a less limiting factor in clothing and household pieces than in wallhangings. My sofa pillows came into existence when I decided the warp lacked the proper dynamics for a wallhanging. Since the colors were compatible with my living room, the warp was finished as pillow tops. (Please do not draw unkind conclusions about my *planning* ability, but instead focus on my adaptability.)

Turned blocks are determined by alternating warp-face and weft-face. The tied block weaves have this feature, too. (See Part II of my article in the Spring 1982 issue of *SS&D*.) Tied block weaves differ from turned blocks, which have the exact same structure in both the warp- and weft-faced areas. The blocks alternate between a 3/1 twill and a 1/3 twill in the twill diaper. For each row of weaving, the positive block is determined by three warp ends with the weft covering one warp end, while the negative block is the opposite, with one warp end to three covered by weft. In damask, the basic structure is a satin weave that appears to be turned so that the long floats are in the weft for one block and in the warp for the other.

Twill Diaper



Damask

PHOTOS: GARY SCHROEDER

As in the tied block weaves, the design is worked out in negative and positive blocks using profile drafts. (See Part I in the Winter 1981 issue of *SS&D*.) In my use of profiles, the warp is the positive block in the design and weft is the negative or background. Unfortunately, most of us are limited by the size of our looms to very few blocks in turned block weaves. Each block requires the number of harnesses dictated by the structure. Therefore, a block in twill diaper requires four harnesses and a damask must have five. Simply expressed, on a sixteen-harness loom, four blocks are possible in twill diaper, but only three in damask.

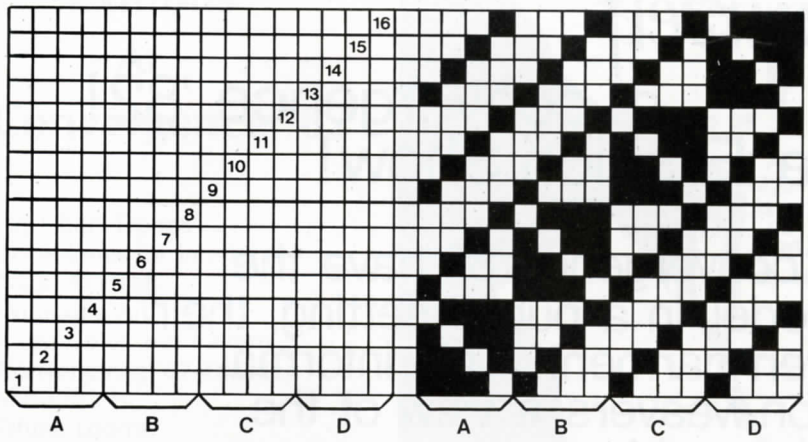
The damask that I am discussing is woven on a rising-shed, harness loom. Damask is the most commonly used weave structure on draw looms. In fact, damask and draw looms are so closely associated that they are often called "damask looms." The mechanism of a draw loom enables blocks to operate independently so many more than three are possible.

Threading the loom for the turned block weaves is an easy operation. The loom is threaded in a straight draw within an individual block for both structures. A straight draw means that the threading is a consecutive sequence. For the twill diaper, the progression is Block A: *1,2,3,4;* Block B: *5,6,7,8;* Block C: *9,10,11,12;* Block D: *13,14,15,16.* Repeating the sequence of a given block will vary its width. Damask is built on the five thread satin weave: Block A: *1,2,3,4,5;* Block B: *6,7,8 9,10;* and Block C: *11,12,13,14,15.*

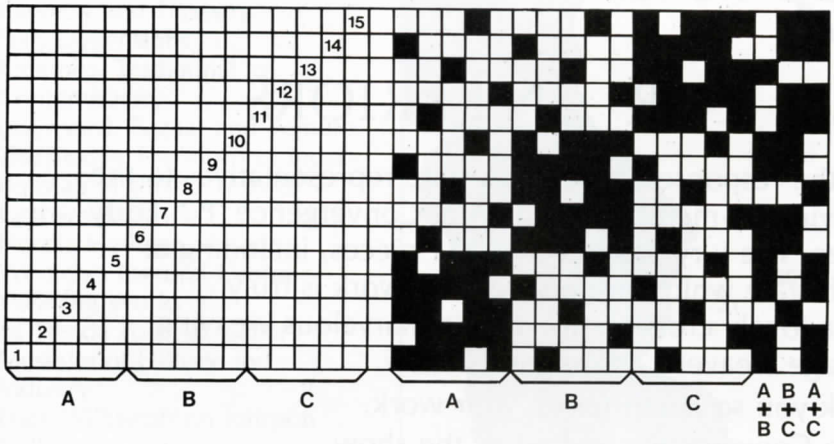
The main structure of the turned weaves is most clearly evident in the tie-up. With the tied block weaves, each threading is unique to its structure when they share tie-ups. When the tie-up for the twill diaper is examined, the different blocks are very evident. To weave a block requires repeating the four treadles in the sequence that controls the block. Of course, besides controlling the positive block, the treadles are also controlling the negative blocks. So, as Block A is weaving a 3/1 twill, it is also producing a 1/3 twill over the rest of the warp. For damask, the treadling

Approach (Part III)

Twill Diaper



Damask



repeat is over five consecutive treadles. As in the twill diaper, the positive block controls the warp-faced weave while also maintaining a weft satin in the negative areas.

The turned block weaves are woven with a single weft without the use of a tabby as in the tied block weaves. Therefore, the turned blocks do not have the bulk of the tied structures. To give the appearance of the blocks turning from warp-faced to weft-faced, the weight of both warp and weft yarns should be similar. Sometimes the warp and the weft yarns are identical, as in your grandmother's damask tablecloth. I prefer to vary the color of the weft yarns, while generally using yarn of the same weight. Color effects have always interested me, so I seldom miss an opportunity for exploration.

Treadling is relatively simple when the warp blocks are taken one at a time. Each treadle is taken in sequence and repeated for the height of the block. Two warp blocks can be combined in a design without changing the tie-up. Two feet are needed: one to treadle the first block and the second to treadle the second block. If the design combines the A and the B block in the twill diaper, the treadling should be as follows: the left foot presses the first treadle of the A sequence and the right foot presses the first treadle of the B sequence. Then, each foot goes on to the second of each sequence, then the third, finishing with the fourth of each. This double treadling is also useful to combine two blocks in damask. It *almost* works. When taken together, the middle treadles of each block cancel each other out and raise all the threads in the two blocks. But luckily, there are usually 18 treadles on a 16-harness loom. Fifteen are employed to create the single blocks, while the remaining three can be used for the center treadling of each combination of blocks. Some fancy athletics are needed for the treadling. To combine Block A with Block B, use the left foot on the first of the A sequence and the right on the first of the B. This also works for the second treadle of each, but for the third use the combination A and B at the far side, then back with two feet for three and four. This is a bit confusing, but considerably easier than retying the loom to combine blocks in the tie-up. A combination of more than two blocks must be done in the tie-ups unless you have more feet than I do.

The turned block weaves are not commonly used by weavers in this country. I imagine that this is because most do not have looms with 12, 16, or more harnesses. Those of us who do have gravitated toward the tied block structures when thinking in terms of blocks. I might not have tried damask unless forced into it by my membership in The Sixteens, whose 16-harness weaving sample group had damask as its project for last year.

The unique properties of the turned block structure make it strong and durable, while not too heavy. This structure can be used in upholstery and clothing fabric, as well as the other household items with which they are more closely associated. The flexibility of the blocks allows for endless arrangements. So, whatever the final product, it can combine serviceability with an individual design.

Bibliography

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