

DOUBLE WEAVES

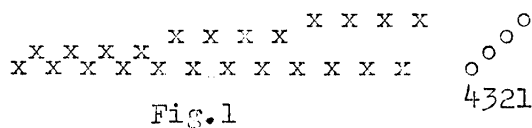
Stitched Layers

There are different reasons for which we may want to have two layers of fabric stitched together. It may be that one layer is used as lining to protect one side of an otherwise weak cloth. Or to reinforce the fabric. Or to make it much heavier.

Since it is impossible to discuss here all the cases when the stitching is applied, we shall take one example from each of the above groups.

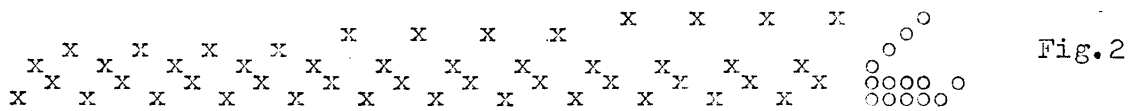
Lining. There are quite a number of pattern weaves which have long floats on the back of the fabric. If these are cut, there is a danger that the pattern weft (or warp) may be pulled out. If they are left they look unsightly, and they still may be pulled out. The best solution then is to cover them with another fabric stitched to the first one at long intervals.

A typical case is swivel weave in several colours. Let us take to start with the draft on fig.1. Here the treadling is always

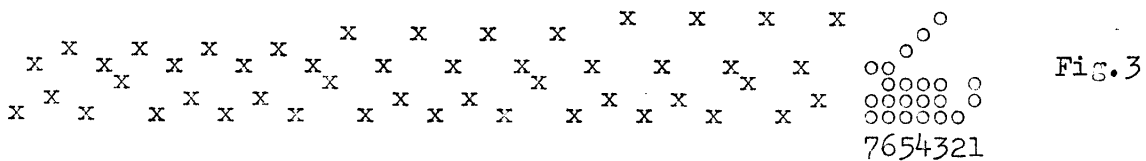


1, 2, 3, 4 with always the same colour on treadle 4, and different colours on other treadles according to the pattern woven. On the back side we have a mass of long

floats (2/3 of the pattern weft is wasted here in floats). To cover them we need a tabby backing occasionally stitched to the front. If it has the same count of cloth as the front - the two drafts will alternate all the time, as in fig.2.



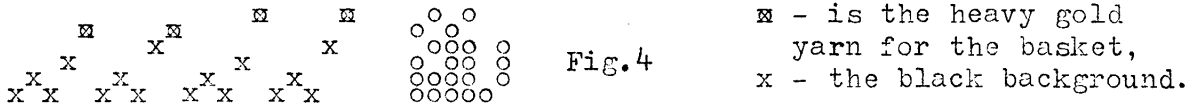
The two lower heddle-frames carry the lining, the upper four - the pattern fabric. But in such a draft we cannot get any regular stitching since none of the frames has properly spaced heddles. Thus we have to introduce one additional frame just for stitching. This is frame 3 in fig.3:



Here the treadles 1 and 2 weave the lining, and 3 to 6 - the pattern fabric. Treadle 7 is used occasionally instead of tr.6 to stitch both layers. The treadling may be: 1 3 2 4 1 5 2 6 1 3 2 4 1 5 2 7.

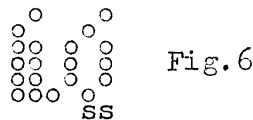
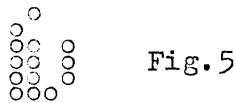
Reinforcing. When we want a stronger fabric, the stitching must be closer, and since it probably will show on, or through the upper layer, it must be planned more carefully than in the case of plain lining.

Let us suppose that we weave a very open basket fabric - so open that it would not hold together without a background. Let us make the basket - old gold, and the ground - black. Here the count of the lower layer will be much higher than of the basket weave. We shall need two stitching frames to alternate the stitching and to avoid thus making rows of stitches which would be visible. The upper layer requires two frames, and the lower - four. Six in all. The complete draft is shown on fig.4.



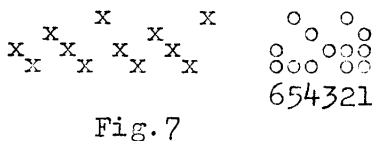
Treadles 1 and 2 weave the tabby ground or lower layer. Treadles 3 and 4 weave the basket. Finally treadle 5 is used instead of 3, and 6 instead of 4 for stitching. The treadling will be: 1 2 1 2 3 1 2 1 2 5 1 2 1 2 4 1 2 1 2 6. Black weft on 1 and 2, gold on 3, 4, 5, and 6.

This is not the only way of stitching. As we explained in the 7-th issue of MW (Drafts for double weaves), any change in the original tie-up for independent layers (fig.5 in our case) made either in the "empty" corner or in the "full" corner will result in stitching. These two corners (lower left, and upper right on fig.5) have ties which serve to separate the two layers.



For instance treadles marked S in the tie-up on fig.6 can be used for stitching, and we could add these two treadles to our tie-up on fig.4.

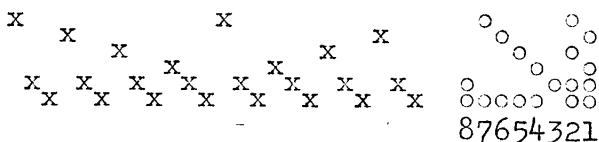
Quilting. To increase the thickness of a fabric, we may not only double it, but insert a padding between the two layers. This is the case of Quilt Weaves. The simplest weave of this kind can be made on 4 frames (fig.7).



The upper layer (frames 3 and 4) has yarn about four times as heavy as the lower one (fr. 1 and 2). Treadles 1 and 2 weave the upper layer; 3, 4, and 5 - the lower layer, but they stitch both layers at the same time.

Finally treadle 6 opens a shed for padding (called wadding). Treadling goes as follows: 3 4 1 3 5 2 6. Fine weft on 3, 4, 5, heavy on 1 and 2, and very heavy on 6.

The stitching may form a pattern. With 6 heddle-frames diamond patterns are quite easy to make. In fig.8 we have a draft for such pattern.



Frames 3,4,5,6 - heavy warp,
1,2 - fine warp,
Treadles 1,2 - heavy weft,
3,4,5,6,7 - fine weft,
8 - wadding.

