
M O D E R N S & W .

It seldom happens that we can introduce a new weave to our readers. And when we say "new", we mean only that as far as we know this weave has not been used in handweaving during the last century or so. So far we have described the following "new" weaves: Swivel (old English spotweave), Locked Wefts, Paper Spots (dropped tabby), Turned Bronson, Double Waffle, etc. Probably none of them is really new, and this applies to the present case as well.

Summer-&-Winter has two qualities which distinguish it from other pattern weaves: uniformity of floats (all of 3, or 2), and the smoothness of texture due to the floats being staggered. Thus in Summer-&-Winter the weft covers the warp (when so desired) much better than in case of Overshot, Crackle, etc. This is particularly important in case of weft-face fabrics, such as bound woven rugs.

However the fact that all the floats are so short (so desirable when strong, firm fabrics are woven) makes Summer-&-Winter of little use in such applications as texture weaving with 3D yarns, soft, flat rugs, couch covers, and so on.

If we could have a Summer-&-Winter with floats of any length (but of the same length in the same piece of weaving) it surely would be an improvement. Then we could adapt it to nearly any purpose.

The weave which we are going to describe is just that: a variation of Summer-&-Winter with floats of 5, 7, or even 9. But we must discourage any undue enthusiasm right away: this is a multi-frame weave only, from 6 frames up. It is true that it could be woven on 4 frames, but only as an uniform texture (fig.1a), and then it

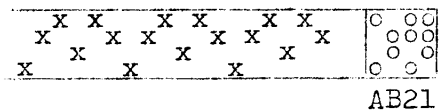


Fig.1a

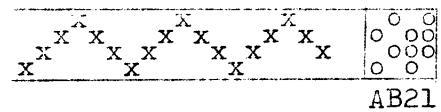
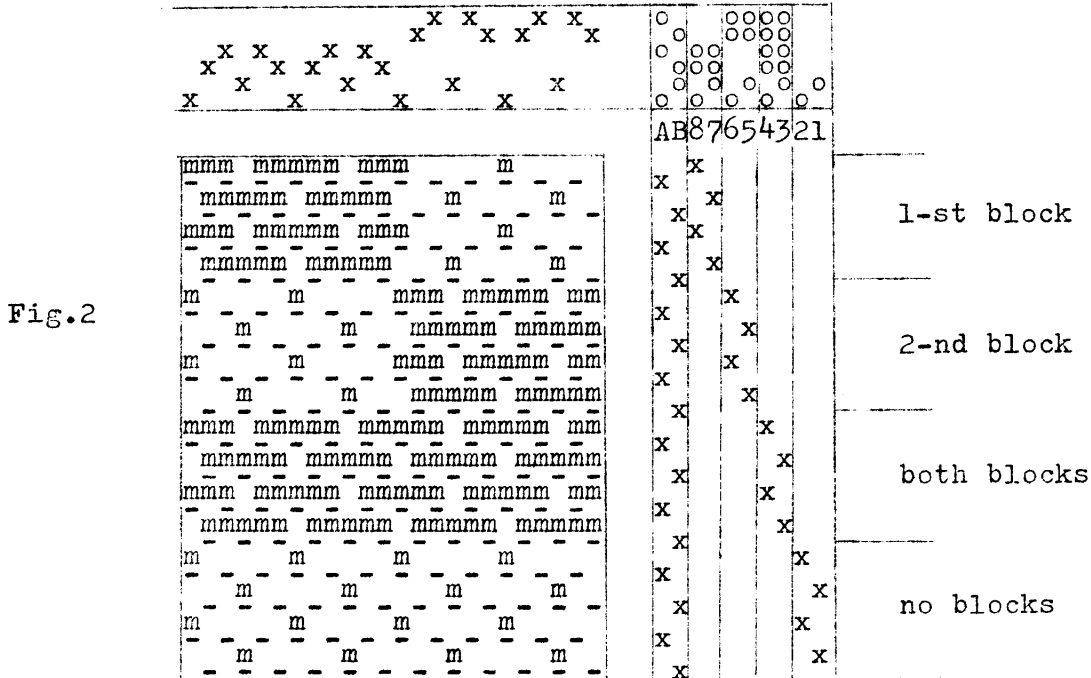


Fig.1b

would not have any advantage over a plain twill as in fig.1b. In both cases treadling: 2,A,1,B will give staggered floats of 5, but the floats will cover the whole surface of the fabric. Such a draft can be of some use to the texture weavers who use 3D yarns. With soft and rather bulky weft the ground will be hardly visible, and yet the fabric will be quite strong. The texture weft on treadles 1 and 2; and the binder on treadles A and B. But there is no pattern of course.

Two-block patterns require 6 frames, and three-block - eight frames. Let us start with the simplest case of two blocks, and floats of 5. The draft is shown in fig.2. The first two frames are playing the same role as usual in summer-&-winter - they stitch the floats of pattern to the ground. But the pattern frames (3, 4, 5, 6) have now two objects to achieve: 1-st to produce the blocks of pattern, 2-nd to supply the tabby for the binder. Obviously the two first frames could not do it. This is why each block of pattern requires now two frames instead of one.



We are using 10 treadles because there are very few 6-frame looms with 8 treadles, and it is nearly certain that an 8-frame loom with 10 treadles will be used anyhow.

The treadling in fig.2 is for plain weaving with a binder on A and B. Treadling for bound weaving will be as follows:

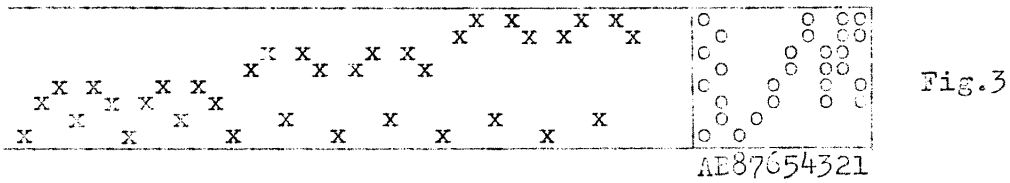
1-st block: 8, 5, 7, 6; 2-nd block: 6, 7, 5, 8;

both blocks: 4, 1, 3, 2; no blocks: 2, 3, 1, 4;

Dark colour on first and third pick in each repeat (underscored), light colour on second and fourth pick of weft. Otherwise the bound weaving is done as usual, and the same rules concerning the selection of warp and weft, treadling, beating etc. as for 4-frame Summer-&-Winter - apply here.

On an 8-frame loom we can have the same weave with 3 blocks of pattern as in fig.3. But here the number of treadles for all possible combinations of blocks (1, 2, 3, 1+2, 1+3, 2+3, 1+2+3, 0) would be 18. Therefore we must use a compound tie-up and a two-foot tread-

ling most of the time. The draw-down has been omitted, because it would look exactly as in fig.2, except for the number of blocks.



Treading. 1-st block: 6+8,A,6+7,B; 2-nd bl.: 5+8,A,5+7,B; 3-rd bl.: 4+8,A,4+7,B; treadle 3 gives the combination of the first and 2-nd block; treadle 2 - 2-nd and 3-rd block; treadle 1 - 1-st, and 3-rd block. No blocks - 8,A,7,B.

Even here to get all blocks (1+2+3) three treadles must be used at a time: 3+4+8,A,3+4+7,B. The "no blocks" combination is often called "ground", but this should not be confused with tabby, which is not used at all except as binder

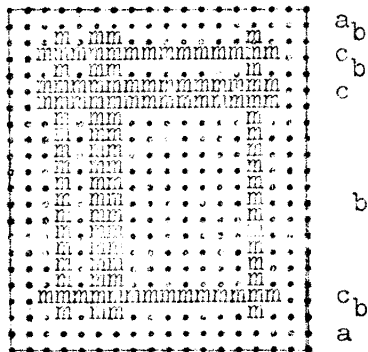


Fig.4a

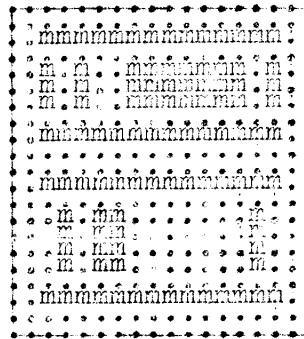


Fig.4b

However in most cases we shall not need all the combinations of blocks, and instead of the tie-up in fig.3 we may use a simpler one. For instance in fig.4a we have only the following combinations: a - no blocks, b - block 3, and c - blocks 2 and 3. Therefore this pattern can be woven on a straight tie-up with 8 treadles. Fig.4b has 4 combinations and can be woven with 10 treadles. The whole draft for both patterns is shown in fig.5. We suppose that one square is equal to 1 inch, and that we have a warp of 30 ends per inch.

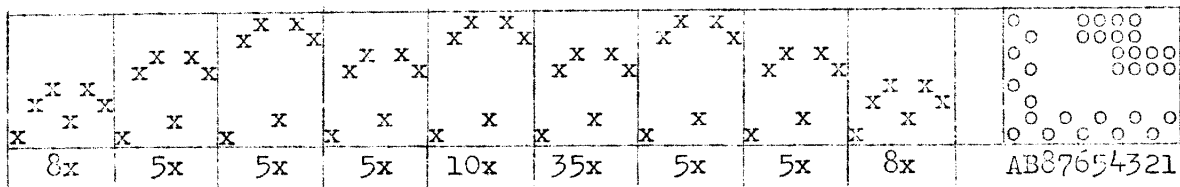
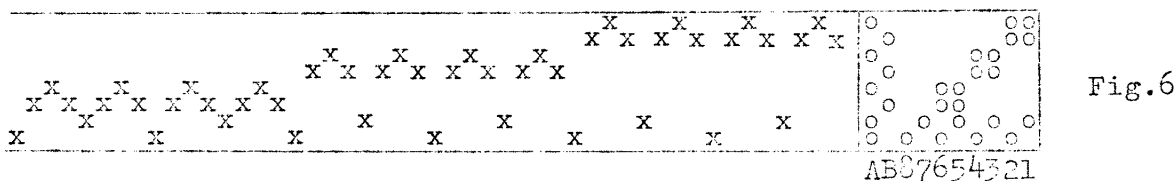


Fig.5

Treading: 2-nd block: 2,A,1,B; 3-rd bl.: 6,A,5,B; 2+3 bl.: 4,A,3,B; and "no blocks": 8,A,7,B.

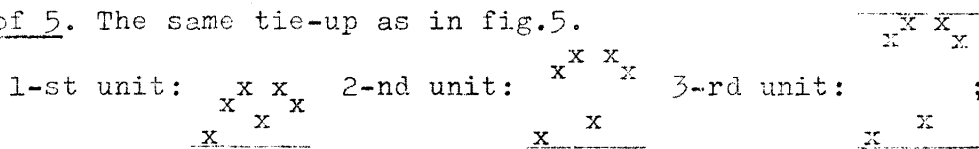
Longer floats require a different threading draft, and incidentally - a different tie-up, at least for tabby. Let us take first floats of 7. The draft in fig.6 shows three blocks on 8 frames:



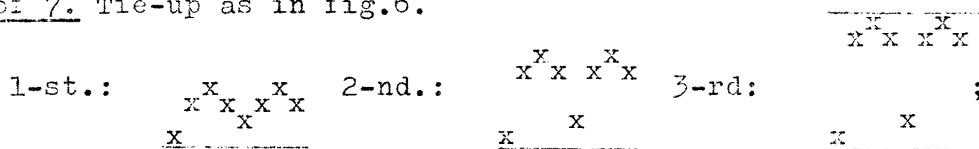
Treadling the same as with floats of 5, i.e.: no blocks - 8,A,7,B; 1-st bl.: 6,A,5,B; 2-nd bl.: 4,A,3,B; 3-rd bl.: 2,A,1,B. The above tie-up does not give combined blocks, but for instance in case of patterns like 4a, and 4b - the same tie-up and the same treadling can be used as in fig.5 except for the ties on tabby sheds.

We have here exactly as in plain Summer-&Winter distinct units of threading, and therefore the same Profiles as for other pattern weaves can be used. The units are as follows:

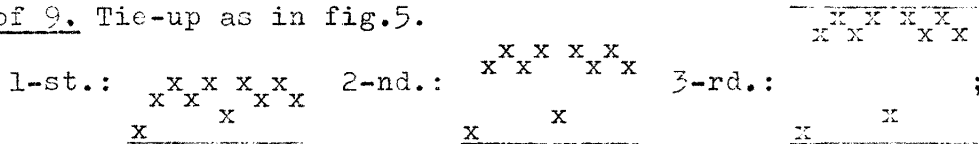
Floats of 5. The same tie-up as in fig.5.



Floats of 7. Tie-up as in fig.6.



Floats of 9. Tie-up as in fig.5.



We could go on like that indefinitely, but floats longer than 9 are of doubtful value.

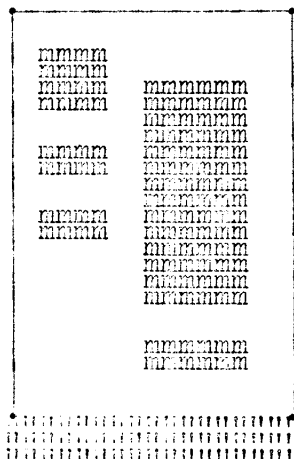
With a higher number of frames we may have a higher number of blocks. Thus with 10 frames - 4 blocks of pattern; with 12 fr. - 5 blocks; with 14 fr. - 6 blocks, and with 16 fr. - 7 blocks. But to take a full advantage of so many blocks we would have to have a still larger number of treadles: 34 for 4 blocks, 66 for 5 blocks, 130 for 6, and 258 for 7. Here even a compound tie-up will not help. Only a table loom (and correspondingly slow weaving) or a Jacquard would answer. Any pattern with more than 3 blocks must be therefore very carefully planned, analysed, and the tie-up established even before the warp is made.

The principal application of this weave is to the modern "texture" weaving. Since the main problem of weaving patterns with 3D yarns is how to show the pattern yarn to its advantage, but only where and when it is wanted, the long-float Summer-2-Winter is the obvious answer. It is much better than the modern overshot (compare "Texture" MW 34) because it produces a more uniform texture, and because blocks of pattern can be combined easier. The length of floats can be adapted to the yarn at will.

Another possibility more in keeping with traditional weaving although also in the "texture" class is to weave fabrics very much like "tissue" weaves, where we have a contrast between the ground and the pattern due to the difference in texture of the weave, but not of the yarn used. Thus we can have fabrics woven all in the same, or very similar yarns with pattern not unlike satin, and ground not unlike tabby. Here all other factors remaining the same as before we use fine, smooth yarns, closely set warp, and rather glossy weft.

PRACTICAL PROJECT.

Wall hanging (over a matlepiece?) 24" by 36". Pattern as in fig.7.



A
B
C
D
C
D
C
D
A
D
A
F

Warp: linen No.1½ natural or light rust.

Sett: 9 ends per inch; reed No.9; one end per dent.

Weft: (binder) linen tow, or homespun No.4, 6 or 8, natural.

Weft: (pattern) very heavy wool, about 500 yds/lb. dark rust twisted with metallic dull copper, or old gold. This kind of wool may be hard to get. Find the heaviest of the required colour, and twist several yarns together. Use a doubling stand to prevent loops at the edges.

Fig.7

Threading draft:

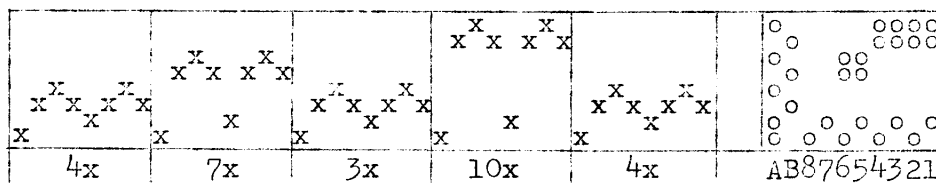


Fig.8

Treadling: A (fig.7) - 8A7B; B - 6A5B; C - 2A1B; D - 4A3B. There should be approximately: 3" of A; 3" of B; 3" of C; 3" of D; 3" of C; 3" of D; 3" of C; 6" of D; 3" of A; 3" of D; and 3" of A. Finish with 6" of fringe in warp.

When the piece is taken off the loom, spread on a table and comb with a wire brush (downwards only) to rise a "nap".
