

S-&-W WITH TABBY GROUND

We have often said that texture may be used in designing in the same way as colour. It can have blocks of pattern and a ground. The difference between the two areas however is not in colour but in the structure of the fabric.

We have described several weaves of this kind, and many traditional weaves are based on this very principle. For instance Bronson Lace is nothing else than two textures (lace and tabby). Even the traditional Summer-&-Winter besides colours has two textures: one with short floats, and the other with longer ones.

In modern weaving we are not satisfied with just any kind of texture, but we try to get an irregular surface either using special yarns or special weaves.

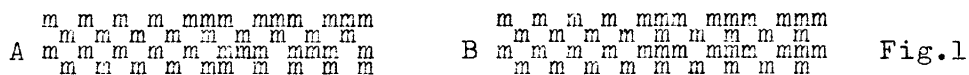
When we intend to get both: irregular texture and pattern of some sort we can not rely entirely on weaves, because we would run into quite a number of frames. At least with 4 frames this can not be done. But if we combine a texture weave with a texture yarn (at least in weft) the problem becomes much easier.

Our objection to traditional weaves is that often they produce a texture which is not only regular, but even has a small pattern of its own, as for instance the already mentioned Bronson Lace. Even when using irregular yarn for weft we cannot get rid of this unwanted pattern.

Other weaves such as S*&-W are free from this fault. Both textures which they produce are not likely to spoil the effect of the 3D weft. But of all these weaves only S-&-W can be woven on 4 frames in such way that we can have the areas of different textures of any size, and that either can take the whole width or length of the woven piece.

What we propose to do here is to have still more difference between the two textures: we shall weave one block of pattern in S-&-W, and the other in plain tabby on both sides.

Colonial weavers would say that this is impossible, that you cannot have a block of S-&-W with tabby all around it. This is because they were very strict about drafting and would not make a draft for S-&-W in any way, other than the one approved by the tradition. But what we care for is the final result and not the way the draft looks.



There is one difficulty however, which lies in the very nature of these two weaves: one repeat of tabby in treadling is 2; one repeat of S-&-W is 4. This seems to be all right, but the tabby binder in S-&-W uses two sheds of tabby and therefore the second tabby in S-&-W cannot coincide with the plain tabby (fig.1 A).

3. Use two yarns in warp: texture yarn on frames 2, 3, and 4; fine and strong yarn on frame 1. The same in weft: texture or 3D on treadles 1, 2, 4; fine binder on 3. Both sides will be alike.

4. Plain warp set as for tabby. Two wefts: one a little heavier than the warp and of a different colour; the second finer than warp and of the same colour. Use first weft on treadles 1, 2, 4; and the second on 3. The pattern in colour will be on one side.

5. Two yarns in warp: one heavy and stronger in colour on frames 2, 3, 4; the second, finer, of a neutral colour on frame 1. Two yarns in weft of the same count and colour as in warp. Heavier yarn on treadles 1, 2, 4; finer on 3.

We have made the draft in fig.2 in the "classical" form to demonstrate its resemblance to Bronson. But for practical purposes, if the project is of any size, it will be more convenient in treadling, if we change the tie-up so that we can alternate the feet when weaving. For instance: treadle 1 - 1,4; treadle 2 - 1,3; treadle 3 - 1; treadle 4 - 2,3,4. Then of course the treadling given above must be changed accordingly.

There is only one objection to the above method of weaving S-&-W. It is this: if we have good 50:50 tabby, the pattern shots in S-&-W are too far apart. This is obvious from the draw-down in fig.2. On the other hand if we have good S-&-W with heavy weft for pattern, and fine for binder - then the tabby will be somewhat distorted, and in many cases will produce small stripes, like in Log-Cabin.

Can we do anything about it? Yes, but at a certain price, as we shall see later. Let us examine the draft on fig.3.

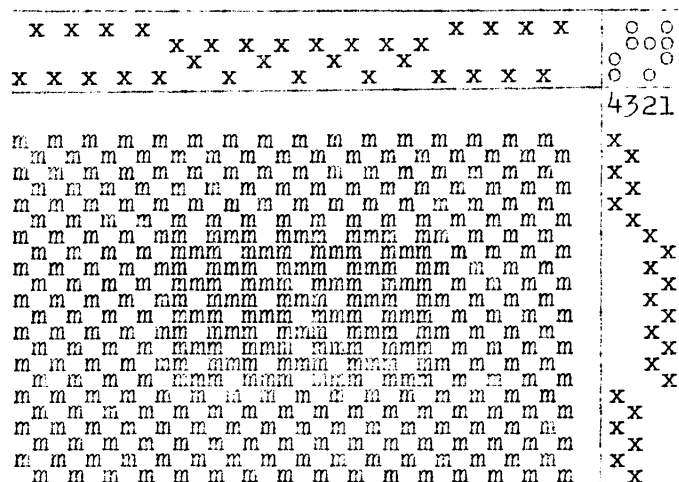


Fig.3

First of all the draft looks much more like S-&-W than the other one. The central part of the threading draft is the traditional S-&-W. The tie-up is very much like the original one, except for one tie on treadle No.1 (frame 4). We could say that so far we have a draft for one block of conventional S-&-W. The tabby part is threaded in the

same way as tabby in huckaback, or huck-lace, or Swedish Lace. So far everything locks perfectly simple.

But... One may ask: Where is the binder? Obviously we can not weave the S-&-W part without a binder; otherwise we shall have long floats in warp at the back of the fabric. The answer is rather unexpected: we must use the binder all the time even in tabby part of the project. The binder must be much finer than the pattern weft. For instance pattern weft: 10/2, binder 40/2; pattern 6/2, binder 25/2, etc.

The complete treading for fig 3 will be then (h - heavy, f - fine weft):

4h,4f,3h,3f - 3 times; 2h,4f,1h,3f - 5 times; 4h,4f,3h,3f - 3 times.

No attempts should be made to keep the two wefts parallel in one shed. Let them twist around each other as much as they like in the tabby part. What is more we can speed up the weaving by using a separate shuttle for the tabby part with both wefts wound together.

This method gives a good fabric both in tabby and in S-&-W. The binder is so fine that it will not distort the tabby.

We have now a choice between the draft in fig.2, and the draft in fig.3. The first gives more possibilities, and if so desired can be woven with one shuttle. The second gives better texture, a more balanced tie-up, but it must be woven with 2 or 3 shuttles.

PRACTICAL PROJECT for 4 frames.

Place mats in linen and cotton. Pattern as in fig.4.

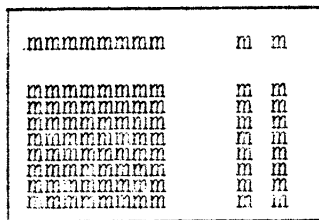


Fig.4

Size finished 12x 18.

Warp: single 14, or 25/2 bleached linen.

Weft: 1½ natural for pattern.

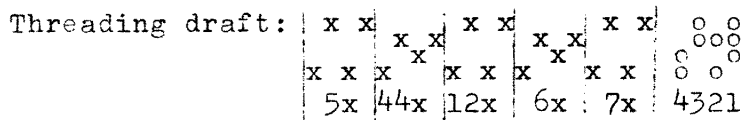
20/2 dull metallic cotton for binder.

Sett of warp: 24 ends per inch.

Reed No.12.

Sleying: 2 ends per dent.

No. of ends: 296.



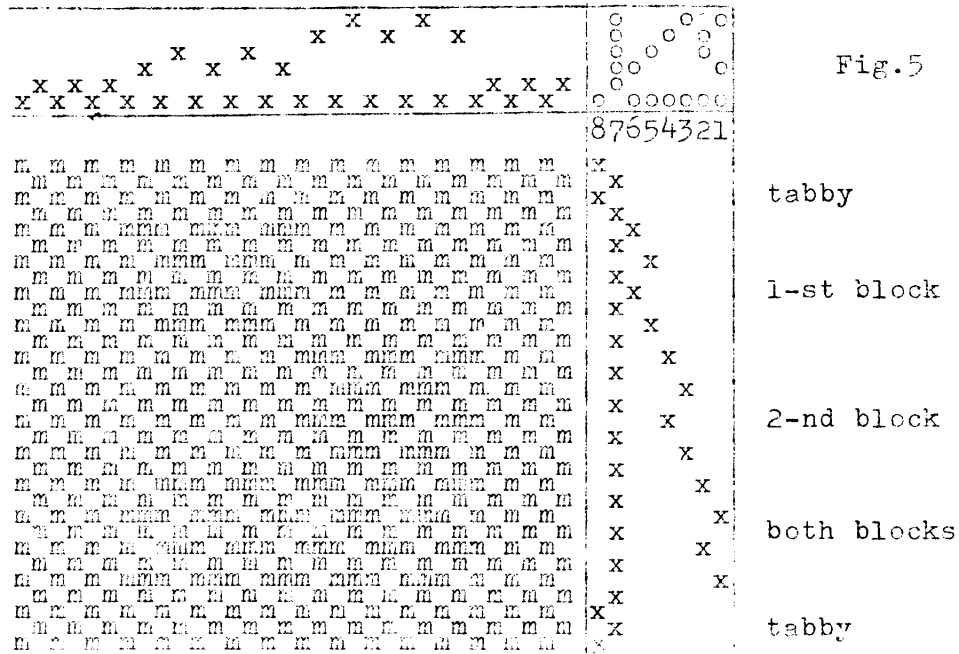
Treading: 1" for the fringe; 4h,4f,3h,3f - 4 times; 2h,4f,1h,3 - to make 9 inches; 4h,4f,3h,3f - 4 inches; 2h,4f,1h,3f - one inch; 4h,4f,3h,3f, - one inch; 2h,4f,1h,3f - one inch; 4h,4f,3h,3f - 2 inches one inch for the fringe.

The following part of this article is only for multi-frame looms, but the first part is necessary to understand the second.

S-&-W on Tabby ground for 8 frames.

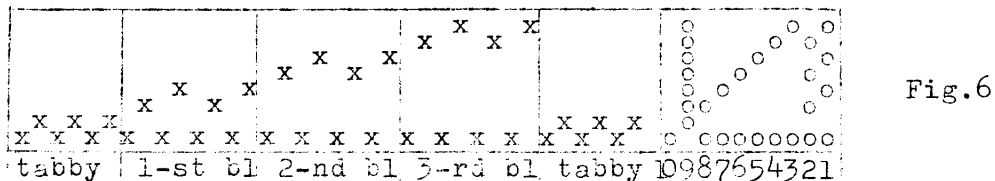
All we have said about this weave in the first part applies here. And the "multi-harness" weavers will have no difficulty other than the drafting. Therefore here we shall concentrate on the drafts. We shall see how the drafts for 4 frames can be developed to suit any number of frames up to eight.

Let us take first the draft in fig.2. Two frames (3 and 4) were needed for one block of the pattern. Therefore we may expect that two more will produce another block, as in fig.5.



Here we have first tabby, then one block of pattern, then the second block, then the two blocks combined, and finally tabby again.

Eight frames will give 3 blocks of pattern combined at will, that is if we have enough treadles. Since most 8-frame looms have 10 treadles, and we shall need 8 for tabby and 3 separate blocks, this leaves only one pair of treadles for combined blocks (fig.6) unless we use compound treadingling.



Here single blocks can be woven in the usual way. Also when we want all three blocks together we can use treadles 1 and 2. But for pairs of blocks we must use two treadles at a time:

block 1 & 2 - 6+8, 5+7; 1 & 3 - 4+8, 3+7; 2 & 3 - 4+6, 3+5.

In this way we may have all possible combinations of blocks. The weaving is necessarily slow, and even laborious because of the tabby: one against seven frames.

From this point of view the draft in fig.3 looks more promising. When developed into an eight frame draft it can also give more blocks of pattern (fig.7).

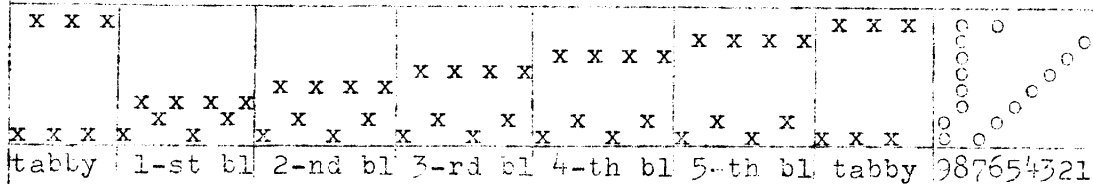


Fig.7

Here we must use compound treadling, and even so we cannot get all combinations of blocks. For instance to get block 1 we treadle 5+7, 5+6; block 2 - 4+7, 4+6. To get two blocks at the same time we can step with the right foot on two treadles, for instance 4+6+6, 4+5+7 will give us blocks 1 and 2. But we can not produce such combinations as 1 and 3, or 2 and 5. Thus if we use this draft at all we must plan the pattern very carefully. Here as in fig.3 the binder must follow not only each shot of pattern but of the tabby ground as well.

On the other hand it is very easy to make samples of 5-block patterns on an 8 frame table loom. Here we are not limited by the number of treadles. But the weaving will be extremely slow.

We hope that this is positively the last article about S-&-W, unless we start some day articles about Draw-Looms.

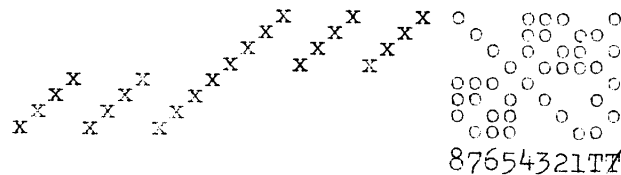
C U R I O S I T Y S H O P

We have stated in the above article that probably many weavers (particularly colonial weavers) must have wished once in a while that they could weave S-&-W with only one shed of tabby so as to have a more uniform texture. Well, can the thing be done at all?

Yes. But plain two-block patterns would require 8 frames.

Whenever we have our loom threaded for 8 frame damask, we can also weave two block S-&-W with only one tabby. For instance: 8T6T for the first

block; and 4T2T for the second. The First treadle from the right is not used at all.



Is it worth while?
