SIX BLOCK OVERSHOT

ON FOUR SHAFTS

Many of our weavers may shudder at this title. What? Six Blocks? Were not the traditional four blocks bad enough?

Then we better explain.

The Overshot we are going to describe is not the same as the traditional weave. The purpose of introducing two more blocks of pattern is not to make still more involved and rich patterns (although the weave could be used to such purpose if somebody desired it), but to create a more interesting texture, and finer design.

The texture of our weave differs from the traditional one, inasmuch as it has no flat ground on which groups of floats form a pattern. Here the ground is rugged and follows the pattern. There is no tabby anywhere, and therefore no tabby binder.

What we mean by "finer design" is that the lines of a pattern are much more uniform than in colonial overshot. This is what one would expect: more components of a pattern give more freedom in designing, and this freedom can be used to make finer lines and a better general effect. On the other hand it can be abused to create more confusion.

In plain Overshot the whole surface of the fabric is divided into: 30% tabby, 40% half-tones (tabby with pattern weft), and 30% pattern floats. In our case of 6-block Overshot we have: 15% of pattern floats, and 85% of ground which is not tabby.

These two factors: that we have 6 components of a line, and that this line is only 1/6 of the ground (instead of 1/3) give a completely different and a much more satisfactory appearance to the fabric, at least from our "modern" point of view.

Finally we have decided to have all floats of about the same length (4 or 5) which gives a uniform and practical texture. Our choice was quite arbitrary, and we can have as well all floats of 6 & 7, or 8 & 9, and so on. But we are of the opinion that it would be unjustified to mix floats of all sorts in the same piece of weaving, because

then we would be worse off than in case of the traditional overshot. Our readers may experiment with small samples of fabrics made with different lengths of floats, and they will probably agree with us.

We have developped this weave in our studio, and we did not hear of its being ever used before, but it is extremely unlikely that it is actually a "new" weave. Such things do not exist. It must have been tried long ago, and probably rejected, because in the past all "texture" effects were rather frowned upon.

The theoretical background of this weave is very simple: plain Overshot has 4 blocks of pattern (12, 23, 34, and 41) plus two sheds for tabby (13 and 24). If we give up tabby, and use these sheds as pattern sheds, we have our six blocks. This is all.

But... because the blocks 13 and 24 are on opposite sheds, they fit between: 12 and 23 (13); 23 and 34 (24); 34 and 41 (13); and 41 and 12 (24). Thus one repeat of a simple diagonal has not 6 but 8 steps - instead of 4 steps in plain Overshot. This makes it look as an 8-shaft pattern weave.

In fig.1 we have a diagonal in plain Overshot with all floats of 4, and in fig.2 the same diagonal in our 6-block Overshot (only floats are shown).

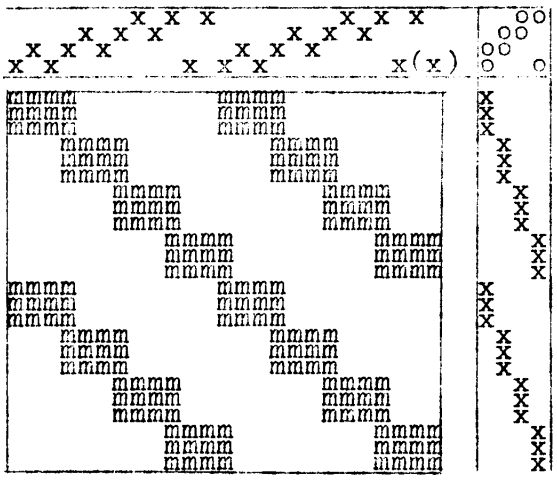


Fig.1

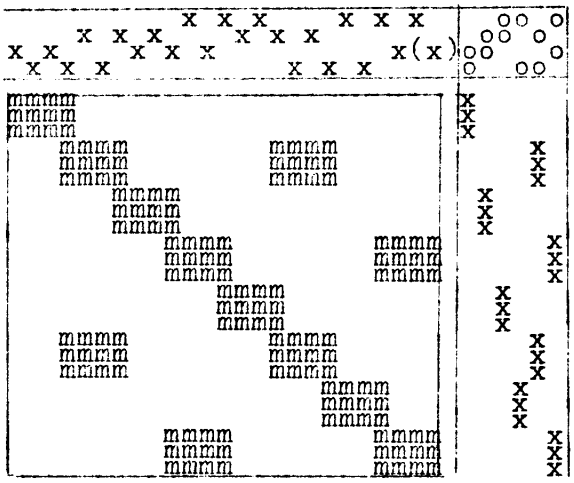


Fig.2

When we compare these two draw-downs we must notice first of all that in the same area we have <u>two</u> parallel diagonals in plain

Overshot, and only one in 6-block Overshot. The second has also four isolated blocks which do not form any particular pattern. The blocks overlap each other by one warp end exactly as in the traditional Overshot. Finally it is quite obvious that in both cases we must have a binder. In traditional weave this binder is usually tabby, but it may be the opposite shed as in bound overshot. In our case there is no tabby, and the only binder is on the opposite shed. In practice this means that when heavy pattern weft is being used on shed 12, it is followed by a finer weft of a different (and more neutral) colour on shed 34; 23 followed by 14; 34 by 12; 14 by 23; 13 by 24, and 24 by 13.

To get the whole benefit of the possibilities of our weave, we must use all 6 blocks, and in the order indicated in fig.2. But they may go up or down forming LH or RH diagonals of any length.

At the turning point we may have a float of 3 or of 5, but the drafting is easier if it is a float of 5 (when all other floats are of 4), when turning from LH to RH, and of 3 when making the opposite turn. This sounds complicated but fortunately we do not need to worry about it. It happens "by itself".

As far as pattern is concerned we can have all sorts of Diamonds and Crosses, but not Stars, Roses, Tables, and Wheels. Or rather they are also possible, but not desirable, since they require blocks with different length of floats.

Let us examine our blocks of pattern. Each block has a definite unit of threading, and blocks written on 13 and 24 - two units each. Thus we have 8 units in all. These units never change. In the table in fig.3 we give all units in three different lengths of floats.

Fig.3

Unit:	floats of 4;	of 6;	of 8;
1	212	21212	2121212
2	131	13131	1313131
3	323	32323	3232323
4	242	24242	2424242
5	434	43434	4343434
6	313	31313	3131313
7	141	14141	1414141
8	424	42424	4242424

When we have a weave with all units of the same length, we can use Short Drafts or Profiles. For instance in fig.4 we have a profile in which one "m" means a unit of 3 heddles (first column in fig.3). The first line from the bottom is unit 1, the second line - unit 2 etc.

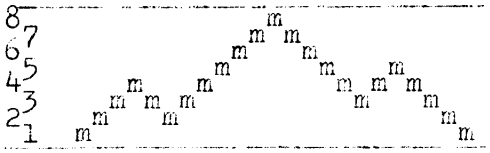
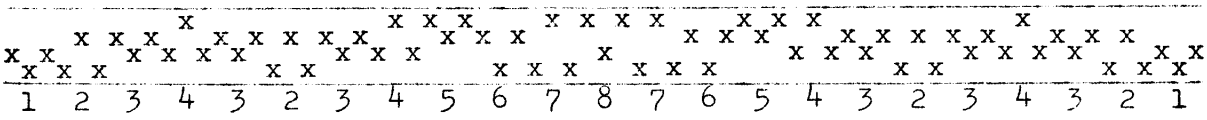


Fig.4

If we replace each "m" with a unit taken from the table in fig.3, we shall have the full threading draft:



1 2 3 4 3 2 3 4 5 6 7 8 7 6 5 4 3 2 3 4 3 2 1

Fig.5

In treadling, units 2 and 6 will have the same treadle, and so will have units 4 and 8. Thus, if we try to square the pattern in fig.4, the treadling will be: 12 - 3x; 13 - 3x; 23 - 3x; 24 - twice; 23 - 3x; 13 - 4x (fig.5 will tell why); 23 - 3x; 24 - 3x; 34 - 3x; 13 - 3x; 14 - 3x; 24 - twice, and reverse.

The whole situation is better illustrated by a draw-down in fig.6. We took here only the first half of the draft in fig.5.

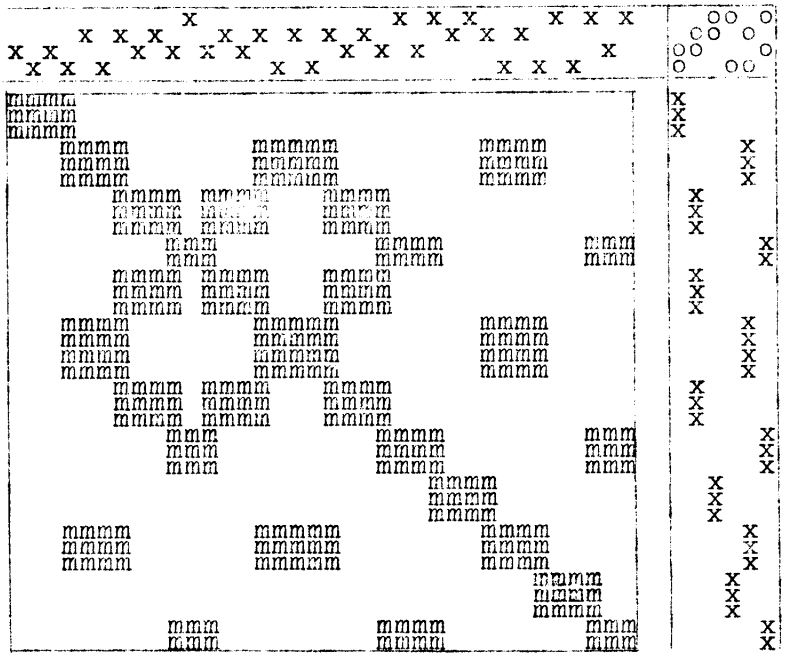


Fig.5

One of the incidental merits of this weave is, that even an experienced weaver, when shown a sample of 6-block overshot, will undoubtedly decide that it is an eight-shaft weave. After all, when counting the blocks along a diagonal we find eight of them. Only a detailed analysis will tell the truth. This of course is hardly an advantage from the point of view of a serious weaver, but still it is there.

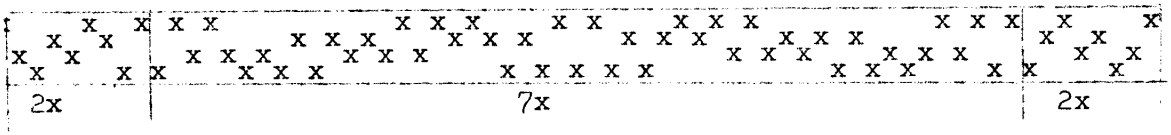
The practical applications of 6-block overshot are numerous. Since the length of floats can be adjusted at will, the weave can be used for practically anything. In fine and closely woven yarn it is suitable even for upholstery, if all floats are of 4. With broken or accidental treadling it will give irregular texture effects, and there is no reason why it could not do for such yardage as heavy coats, bedspreads, and blankets. It may also give good mats, towels, drapery, heavy flat rugs, and what not.

We may find it advisable to elaborate on this weave later on. In the meantime we shall limit ourselves to just one

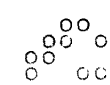
PRACTICAL PROJECT.

"Gothic" place mats in cotton.

Warp: 16/2 cotton, ivory. Number of ends: 382. Width - 12¾". Sett - 30 ends per inch. Reed No.15; two ends per dent. Threading draft:



Tie-up:



Treadling: 1,2 - one inch; 1,6,2,5,1,4,2,3 - twice; (1 - 3x; 6 - 3x; 2 - 3x; 5 - 3x; 1 - 3x; 4 - 3x; 2 - 3x; 3 - 3x; 1,6,2,5,1,4,2,3) - this group repeated until the desired length of the place mat is reached. Finish with one more: 1,6,2,5,1,4,2,3, and one inch of 1,2. Each shot of the pattern weft to be followed by one shot of the binder on the opposite shed, i.e.: 2 after 1; 1 after 2; 5 after 3; 6 after 4; 3 after 5; 4 after 6.

The weft: 10/2 mercerized cotton, rust, for pattern; 20/2 soft cotton, old gold - for binder.

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MORE ABOUT "NET WEAVES" IN THE NEXT ISSUE OF THE "MASTER WEAVER".

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