



Figure No.3

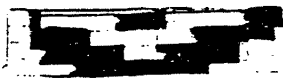


Figure No.2

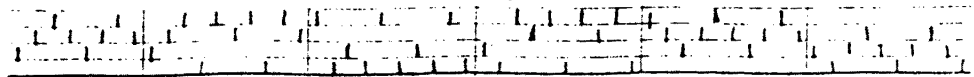
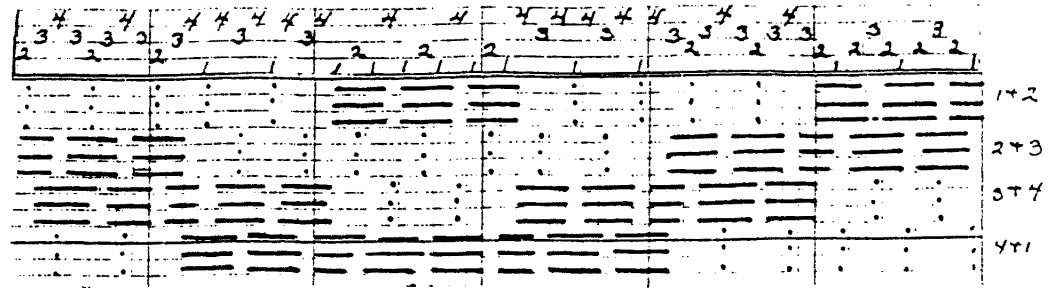


Figure No.1



At Figure No.1, we have one repeat of the pattern draft as given in Palmgren's "Vav-bok" Vol. II. Page 38. Just below the threading draft each pattern block is drawn down 3 times, exactly as it would look if woven. These pattern blocks can be drawn down so they form large squares if desired. And the same order can be followed as to weave as "drawn in" on the diagonal. Drawing down this much of a pattern is really a check on the threading draft, and will show exactly what happens when each pattern block is woven, and if the threading draft is correct. Examine this draw down, and note that occasionally there are 2 thread blocks instead of three thread blocks. These threads must be added to keep the tabby alternation correct, as at no time, should one jump either from 1 to 3, or from 2 to 4 when writing the draft. And there must be no 4 thread blocks either.

Figure No.3 is practically the key draft for the threading draft at No.1 and No.2. On this key draft the 2 thread pattern blocks are counted the same as a 3 thread block. This drawing expresses the pattern as a solid effect, and each square on the cross section paper represents one unit, which is a pattern block of 4 threads, or an overshoot skip of over 3 threads and under 1 thread in the actual weaving, as shown at the draw down of Figure No.1. The exception is of course the 2 thread blocks, which may be counted the same as a 3 thread block, or simply omitted in the drawing to show the pattern effect if desired. Study this carefully. The drawings at the top of Page 1 are pattern effects that can be obtained by weaving the threading drafts at Figure No. 1 and No.2. They indicate three different ways in which this threading may be woven. The numbers at the right of each drawing express the pattern block needed to weave to gain the effect. Note that these drawings indicate simply pattern effects, not actual weaving.

Twills.

These patterns are very effective if based on the simple twill, herringbone, and rose-path order. These are the basic drafts to which we have referred in the writing of the over-shot drafts. Figures No.4, 5, and 6 all show the draw down of the actual effect of the weaving of the pattern blocks in the order 1&2, 2&3, 3&4, 4&1, and repeat.

Figure No.4  
One repeat



Figure No.5  
Two repeats

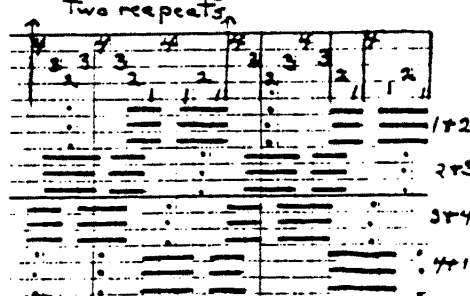


Figure No.6  
Two repeats

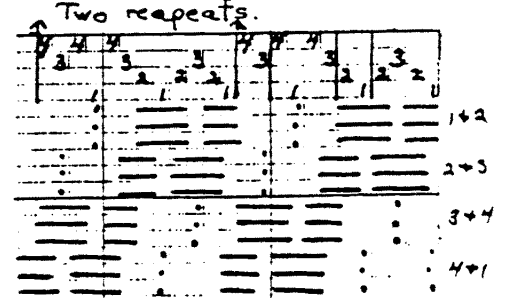
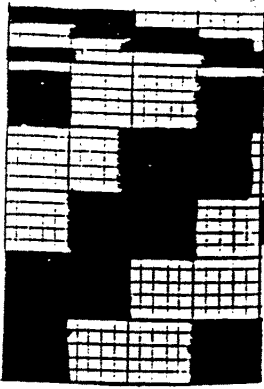


Figure No.4 is the same order as the Swedish drafts are written. The pattern units are 1,2,3,2; then 1,2, a 2 thread block; the next unit 3,4,3,2; then 3,4, a 2 thread unit, then the third unit block 1,4,3,4. This is one repeat. Note how the 2&3 pattern block and the 3&4 pattern block overlap. Two repeats of both Figure No.5 & No.6 are written. Note carefully the difference in the way the pattern blocks weave. In all three of these drafts the order of the weaving is the same namely, - 1&2, 2&3, 3&4, and 4&1. Also notice that the 2 thread units are the same in each draft.

Twill -5 unit pattern blocks.

Figure No.7



- a. Key Draft
- b. Draw down effect of pattern

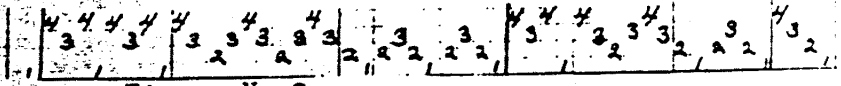


Figure No.8

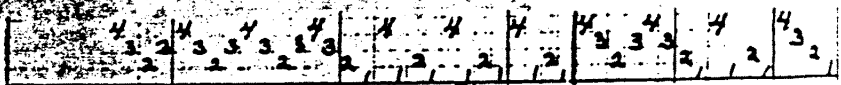


Figure No.9

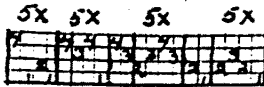
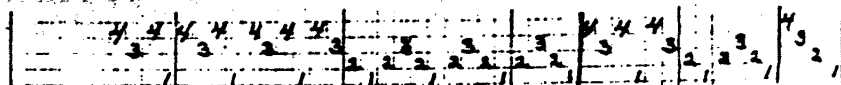


Figure No.10.

- c. Threading draft, each unit repeated 5 times.

At Figure No.10, we have another pattern block added to Figure No.7. This block is 1,2,1,4. This makes the 1&2 and 4&1 pattern blocks overlap. Instead of writing long threading drafts, especially when the units are repeated, write them as at C, No.10

Repetition of the Twill, as a basic threading draft idea. Compare Figure No.7 above with Figure No.4 on Page 2. First we have the regular simple twill, then one repeat of Figure No.4, continue and note that the rest of the draft is written exactly like Figure No.4, except that each unit pattern block is repeated 2x. In any threading draft you may wish to write, these unit pattern blocks may be repeated as many times as desired. Figure No.8 above is based on the same order as No. 5. It is one repeat of the simple twill, one repeat of Figure No.5, then each unit pattern block is repeated 3x in the same order as Figure No.5. Figure No.9 is one repeat of simple twill, one repeat of Figure No.6, and then each unit pattern block of Figure No.6 is repeated 3x. Study this and draw down 2 repeats of each of these pattern threading drafts at Figure No.7, 8, and 9, to see the difference. Many interesting pattern drafts can be built up by changing the number of the repeats of these pattern unit blocks, but keeping the same order as the twill, namely 12, 23, 34, and 41. Now let us return to study Figure No.2 again. Note that if you wish the 1&4 unit to overlap the 1&2 unit, the 1,2,1,4 unit pattern block must be added to Figure No.4, then when the 1,2,3, 2 unit is repeated each pattern block will overlap the other. Here is another point, this 1,2,1,4 block can be used as the center, as it is in Figure No.2, and the pattern threaded back reversed to the beginning. This resembles the basic rose-path idea. Many pattern threading can be devised by just keeping to the order of these basic drafts if the sizes of the number of repeats of the unit pattern blocks is changed. They can be written just as twills, or a center can be made as in Figure No.2, and the pattern repeated back to the beginning.

Explanation of the Tie-up. This is a question I am often asked. The answer is to weave each unit pattern block, the loom harnesses must be tied up to the treadles to weave the unit pattern blocks as they are written in the threading draft. Hence for "crackle" weave patterns, the tie-up is the same as for over-shot patterns, - namely harness 1&2, tied to treadle 1; harness 2&3 tied to treadle 2; harness 3&4 tied to treadle 3; and harness 4&1 tied to treadle 4. If the loom only has four treadles, one must weave with two feet, with one harness tied to each treadle. Plain or the tabby weave is 1&3; and 2&4. With the Structo loom, the harnesses rise when the levers are pulled down, so in order to have the pattern come on top of the weaving, the order has to be reversed; that is to weave 1&2 unit bring down levers 3&4; for 2&3 unit, bring down levers 1&4; 3&4 unit bring down 1&2; and for 1&4 unit bring down levers 2&3.

Key Drafts for "Crackle" Weave Patterns. It is rather difficult to express exactly the pattern threading with a key draft on account of the two thread blocks and the overlapping of the blocks. But these pattern drafts can have very large pattern blocks and have many design possibilities, and it takes much time to write up the effect to the full size of the draft. One square of cross section paper can be used to express one 3 thread unit pattern block; or if the draft is very large one square can express 2 three thread unit pattern blocks, or even 3 three thread unit pattern blocks. The 2 thread pattern blocks can be disregarded or counted in, as desired, for they will make but little difference as far as the pattern effect on paper is concerned.