COLOURS IN CRACKLE

If we take a very simple draft of Crackle weave with four blocks of pattern, each block being used only once, we can weave each block in a different colour if we so desire. Fig.1 shows how this is done.

Fig.1

The treadling never changes, although for practical projects we would change the tie-up so as to be able to alternate the feet. What changes is the order of colours.

This type of treadling looks very much like bound weaving, and if we eliminate the binder (not shown in fig.1 anyhow) we shall have bound Crackle.

The main object of bound weaving is not only to do away with the binder, but first of all to cover the warp completely with weft. This cannot be done by treadling alone. The warp must be very open (for rugs 6 to 10 ends per inch), the weft soft and bulky, and the beating very hard. As a result we have no take-up in warp but plenty
in weft so that we must leave a lot of weft in each shed. Otherwise the edges will be pulled in to the point where further weaving is impossible.

Much finer fabrics can be also woven in bound crackle simply by using yarn about 4 times finer than the one for rugs, and setting the warp twice as close. But then the weaving is very laborious because of the very high number of picks per inch.

When making our own patterns in colour we must realize what exactly is happening, and this is why we made the draw-down in fig.1. This draw-down is divided into 16 areas: 4 blocks of pattern (1, 2, 3, and 4 in threading) woven in 4 different ways, that is with four variations of the order of colours (A, B, C, and D). The last column to the right of the treadling draft indicates colour. Let us suppose that "m" is black, "o" - red, "-" - yellow, and "-" - white.

The first thing we can notice when looking at the draft is that in no area we shall have pure colours. They are always blended because each area is woven with two rows of floats produced by two treadles, and each treadle carries a different colour. For instance area 1-A has floats "m" and "o".

Thus areas 1-A, 2-D, 3-C, and 4-B will be red-black; areas 1-B, 2-A, 3-D, and 4-C - yellow-red (orange); areas 1-C, 2-B, 3-A, and 4-D - yellow-white; and areas 1-D, 2-C, 3-B, and 4-A - white-black (grey).

If we want areas of pure colour we must use two shots of the same colour in each repeat of treadling. For instance if in fig.1 we shall make both "o" and "-" red, then we shall have pure red in areas: 1-B, 2-A, 3-D, and 4-C. The remaining areas will be blended.

Finally if we want two pure colours, we must use each of them twice, for instance: black, black, white, white. This will give us pure black, pure white, and grey.

Keeping all this in mind we can start designing patterns. We use profiles as in the former article about Crackle (MW 66).

Fig.2 shows a profile and short tie-up of a draft similar to the one in fig.1. Please note that the short tie-up is not the same as the real tie-up, because the
the short tie-up corresponds to the units of threading and not to the shafts. Thus short tie-up in fig.2 is the same as the tie-up in fig.1. When making a draw-down under the profile we mark the colours with letters, not symbols used in fig.1. In the treadling all 4 shots of one repeat are marked in one horizontal line. Fig. 3 is a step-by-step illustration of how this is done. Compare with the first repeat of treadling in fig.1.

Fig. 3

In this way we fill all colours in the treadling and in the draw-down. The short draw-down should not even try to include all repeats of treadling actually used. Their number in bound weaving is always very high. We simply mark the depth of each block in inches. For instance if one "m" means one unit (4 warp ends) then it will take about ½" in threading. Therefore each line of treadling, or one square on graph-paper should also correspond to ½" regardless of how many picks of weft it will take to weave it. The latter can be established only on the loom.

The following short drafts give examples of patterns. For simplicity's sake we use only two colours. More can be easily added.
In fig. 4 both profiles have only 3 units in threading. This was necessary to avoid overlapping blocks in pattern. Both profiles are woven on exactly the same principle, the same order of colours in treading. The first profile may be considered as original, the second as derivate.

In all cases borders will be necessary, even if very narrow. In threading they are just plain twill: 1234, or 4321, whichever fits better. In treading it is better to experiment. We can try for instance: bbbw, wwbw, bwww.

PRACTICAL PROJECT. A Rug 36" by 45".

Warp: 8/4 cotton, natural; sett - 8 ends per inch; reed No. 8; one end per dent; No. of ends 304. Threading:

Pattern:

Weft: heavy two ply wool (No. 2/2)

b - black, or dark grey, w - white.

Treading:

1w 3w 2w 4b 1b 3b 2w 4w 1w 3b 2b 4b - to make one inch.

1w 3b 2w 4b to make 3".

1b 3w 2b 4w " 12"

1w 3b 2b 4w " 3"

1b 3w 2w 4b " 3"

1w 3b 2w 4b " 3"

1b 3w 2b 4w " 12"

1w 3b 2b 4w " 3"

1b 3w 2w 4b " 3"

1w 3b 2w 4b " 3"

1w 3w 2w 4b 1b 3b 2w 4w 1w 3b 2b 4b - to make one inch.

ERRATA. Please, correct the tie-up in the Practical Project in Master Weaver 66, page 12. It should be: 

Sorry!