

TWO-HARNES METHOD

Crackle. Summer-and-Winter.

Swivel. Embroidery Weaves.

A two-harness loom, once set up and threaded is about the most versatile piece of weaving equipment one can imagine. Without changing anything but the treading we may have hundreds if not thousands of patterns woven either in 1:3 turned twill, or in crackle, or in summer-and-winter, with all the variations peculiar to these weaves. For instance a 1:3 twill can be woven as biased, broken, sateen, wave, stockinet, dornick twill, mixed (with tabby), and so on. We shall describe here only the typical examples of each weave,

C R A C K L E

It can be woven on any draft made for 1:3 turned twill, provided that the tie-up has two treadles for tabby. Since usually tabby is required even in dornick to start the warp, space the woven pieces, for making fringes etc., there is no need to touch the tie-up at all.

We have the typical tie-up for dornick with tabby treadles on fig.1. If we use for the pattern just one of the twill treadles (3,4,5, or 6), and insert one shot of binder after every shot of pattern, we shall have crackle weave. The draw-down on fig.2 explains the technique better than any

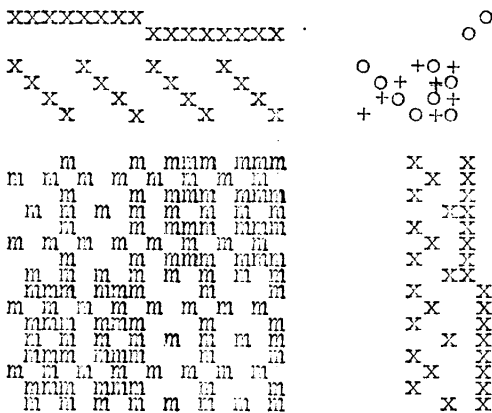
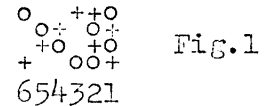


Fig.2

description. Here the length of floats will be 3 as in traditional crackle. The difference is that we won't have any floats of 2 joining the blocks. The binder will be probably finer than the pattern weft, although the fabric can be woven with one shuttle i.e. binder and pattern of the same colour and grist.

Although all four twill treadles (3,4,5,or 6 fig.1) can be used to weave crackle, they should be selected so that all floats in one block are of the same length. For instance in fig. 2 either treadle 3 or 6 will give all floats of 3.

S U M M E R - A N D - W I N T E R

The tie-up here is the same as in fig.1. Two pattern (or twill) treadles (3 and 5, or 4 and 6) are used alternately instead of only one as in crackle. Here some of the floats (see fig.3) must be shorter than 3 at the edge of each block. The binder can be used after each shot of pattern or only after 2, 3 or 4 picks of pattern weft. It cannot be dispensed with entirely because of the floats in warp, which would grow indefinitely.

Bound Summer-and-Winter presents a problem here. Since the alternate shots of weft are on opposite sheds we would have to change with each pick of weft both the ground and the pattern frames. This makes weaving very slow, even if theoretically possible.

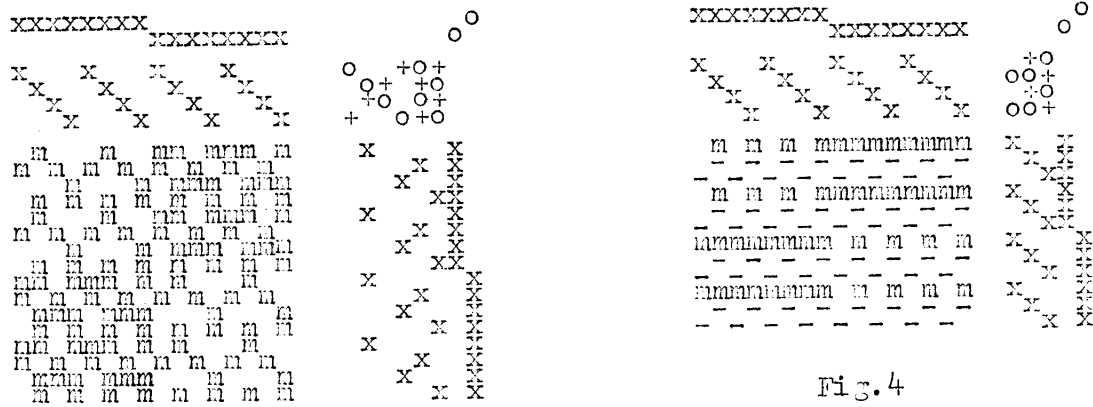


Fig. 3

Fig. 4

S W I V E L

The tie-up for swivel must be slightly changed as in fig. 4. There is only one pattern treadle tied to frames 1 and 3 for the sinking shed, and to the frames 2 and 4 so that they will be in neutral position. The tabby treadles remain as before. The pattern as always in swivel is visible only because the pattern weft is of a different colour than the ground. Consequently on the draw-down we have marked the ground as "G" and pattern as "P". The long floats in pattern weft are either cut off or left on the back of the fabric. The shots of weft are in the cloth much closer together than on the draw-down because one of the tabby shots comes in the same shed as the pattern weft.

EMBROIDERY WEAVES

We shall give only two examples of embroidery - fig. 5 and 6. The ground in both cases is tabby, but it may be twill as well.

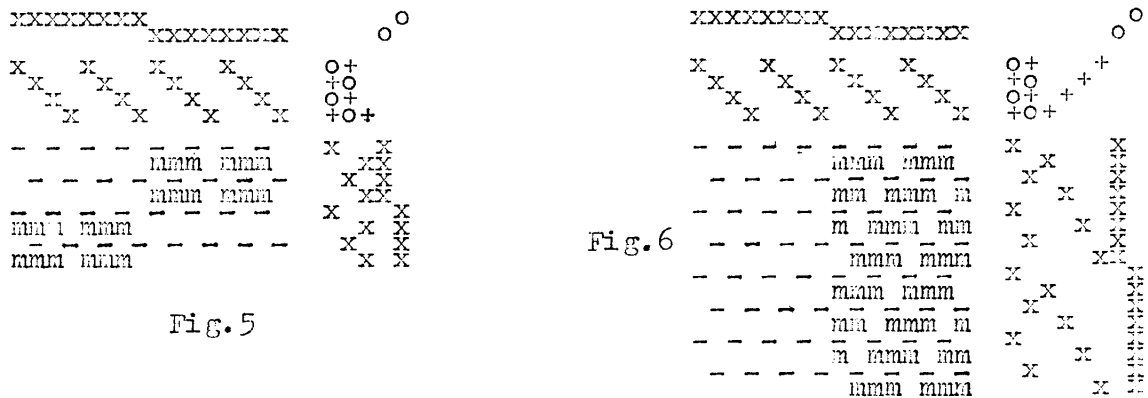


Fig. 5

Fig. 6

Here the floats are underneath, and as in case of swivel they are cut off. Otherwise the draw-downs are self-explanatory.