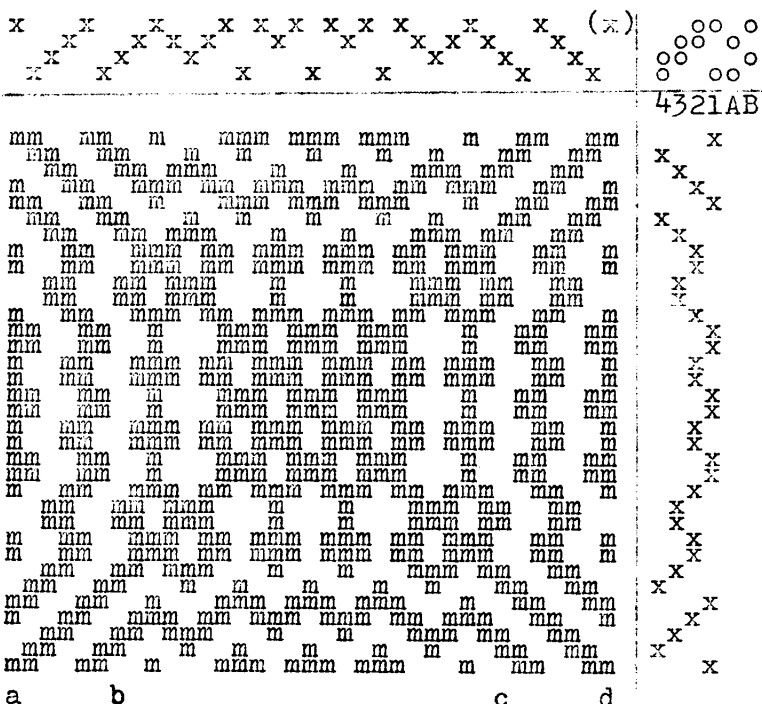


CRACKLE & TWILL.

There are weaves which can be mixed in the same draft, and there are other weaves which should not. The general rule is, that two weaves which produce about the same structure of the fabric can be used together. For instance: summer-and-winter and crackle (they are nearly the same weave), plain overshoot and overshoot on opposites, Bronson lace and spot, Bronson lace and barley corn, diamond twill and summer-and-winter, and finally crackle and diamond twill.

But why should we mix two different weaves in the same draft? The answer is that there are certain patterns which cannot be woven in any other way for one reason or another. For instance many traditional patterns originally woven in overshoot cannot be used for upholstery, table linen and so on, because they have too long floats. When they are transcribed entirely into crackle, the floats are short, but the pattern becomes too large (usually four times as large as the original). When we try to reduce the pattern to a more reasonable size, we find out that we must either distort the design or weave a part of the draft in diamond twill instead of crackle. This is because the smallest possible block of pattern in crackle is 5 (one unit of four plus one incidental), and it cannot be subdivided.

The need of replacing one part of the draft with twill is still more obvious when we draw so called miniature patterns, which may be reduced from traditional ones, or of an original design. In all such cases diamond twill will be used for drawing the small blocks of the pattern and crackle for the large ones. Twill blends with crackle very easily since both have the same length of floats (2 and 3) and the demarcation line between the two does not show in weaving. Fig.1 shows a draft written in twill from a to b, and from



c to d, and in crackle from b to c.

The treadling here is "as drawn in", and whenever a mixture of crackle and twill is used, this is the only treadling. Any other would destroy the twill part of the draft.

We shall get still better results if both the twill and the crackle are longer in the threading draft. Unfortunately we can not give here the draw-downs of such patterns since they would take a whole page or more. But here are a few suggestions (fig.2, 3, and 4).

Fig.1

begin:→

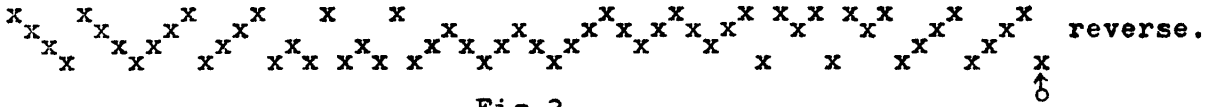
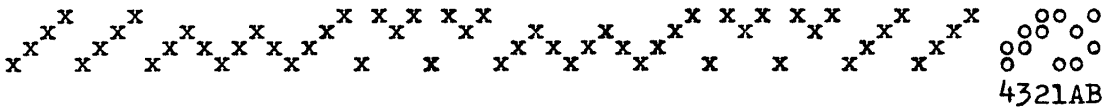


Fig.2

The tie-up here is the same as in fig.1. The treadingling should be: 23412344321432144114411433443344322332233211221122143214321 and reverse. It must be remembered that in reversing the threading draft the central heddle (marke "o") is not repeated, but in treadingling we do repeat the last treadle.

Another draft of this kind is shown in fig.3:



This draft is not symmetrical and the threading shows one repeat. The treadingling is:

43214321433443344321122112214334433443211221122143214321.

A practical project:

Table cloth 45 x 72. Warp: 10/2 white cotton, 24 ends/". 1080 ends. Weft: 10/2 ivory cotton; binder 20/2 white cotton.

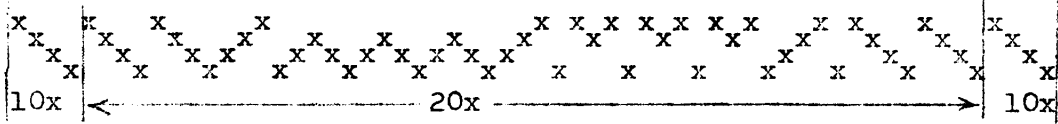


Fig.4

The tie-up as in fig.1 or 3. The treadingling:

2341 - 10x; 234123443214334433443344321122112211221432112342341 - as many times as necessary to make the whole length; 2341 - 10x.

The weaving may be easier if instead of 20/2 cotton, we shall use for binder single linen No.25.

One must remember that, when weaving rather involved patterns in twill and crackle, mistakes are easy to make and difficult to detect. But they show very well when the piece is finished and ironed. To avoid them, we may write down the whole treadingling of one repeat with binder, e.g.: 2A3B4A1B... and so on. Never stop weaving except at the end of a repeat. In case of emergency (broken warp end etc) mark the place on the treadingling draft. At the end of each repeat check it carefully in oblique light (strong flashlight). Avoid strong light during weaving. It is worse than useless, because nobody can focus the eyes on a small pattern for hours anyhow, and the eyes tired by the constant glare do not see the mistakes any more.
