It would seem at first that the disposition of colours in a finished corduroy is essentially the same as in the fabric before cutting the pile. That is, for instance if an overshot draft has been used to weave corduroy, the same pattern in the same colours will remain after cutting. Unfortunately the problem is not as simple as that.

Each row of pile is composed of two half-floats (fig.1). If the two floats are of different colours, the pile will be a mixture of these two colours. If both floats are of the same colour, then there will be no pattern whatsoever, because we use only two opposite sheds for reasons explained in fig.2.

Fig.1

The final mosaic of MW. Only at the expense of a rather difficult cutting we could get two rows of pure colour and two mixed ones (fig.2). The cutting will be easier but the floats shorter if we use the draft with a standard tie-up as in fig.6.

Fig.2

The situation is much easier in case of all-over-spot weave. Here the floats do not overlap and we can use three blocks of pattern on a 4-frame loom, as in fig.3. If we make the first block white (treadle 3), the second, and the third - black (tr.2 and 1), then the float 1 will be white, and the floats II and III - black. After cutting we shall have three rows of pile: "a" - a combination of floats I and II, and consequently partly white, partly black, "b" - black and black, and "c" - black and white. Thus the purely black rows will stand out on the background of more or less grey pile. Simple diamond pattern can be woven in this way as in fig.4, with

Fig.3

the following treadling: 1w, 2b, 3b, 4 - for the 1st block; 1b, 2w, 3b, 4 - for the 2nd; and 1b, 2b, 3w, 4 - for the third, "w" - white, "b" - black. Binder on treadle 4. Treadle 5 can be used after 4 to reinforce the fabric - it will go in the same shed as the pile weft, but without forming floats.

More "modern", unsymmetrical patterns can be woven on similar drafts, as for instance in fig.5.
Here we start with grey (or rather mixture of black and white) all across: 1b, 2w, 3b, 4. After about 3\textsuperscript{1/2} of this border we change to: 1w, 2b, 3b, 4 and keep this treadling for another 3\textsuperscript{1/2}. Then we repeat the grey as before and for the same distance. Finally we weave the large black block 1w, 2b, 3b, 4 for approximately 10\textsuperscript{1/2}. The above dimensions are for the sett of warp of 16 ends per inch. The rows of pile will be spaced \(1/4\)\textsuperscript{1/2}, and the length of the pile will be \(1\)\textsuperscript{1/2}.

The pattern will be as in the draw-down on fig. 6: one block with ground. In fig. 7 and 8 we have another kind of patterns. Three blocks without ground. The draft for both of them is the same and it is shown in fig. 9.

The treadling for a pattern as in fig. 7:

\begin{align*}
1w, &2b, 3b, 4 - 10\textsuperscript{1/2}, &1b, 2w, 3b, 4 - 6\textsuperscript{1/2}, &1b, 2b, 3w, 4 - 3\textsuperscript{1/2}.
\end{align*}

The treadling for the pattern in fig. 8:

\begin{align*}
1w, &2b, 3b, 4 - 3\textsuperscript{1/2}, &1b, 2w, 3b, 4 - 6\textsuperscript{1/2}, &1b, 2b, 3w - 10\textsuperscript{1/2}.
\end{align*}

It should be understood that the "grey" background is really striped in the vertical direction. The shorter the pile, and the finer the yarn used - the more uniform this background appears.

Stripes both vertical and horizontal are quite easy to weave with any draft. For vertical stripes just alternate two colours all the time, for horizontal ones - weave with one colour for several picks, and then change to the other colour.

By combining both methods we can have checkered effect. For instance in the draft No. 5 page 5 MW.14 we treadle: 1w, 2b, 3, 1w,
2b, 4 for about one inch, and then: 1b, 2w, 3, 1b, 2w, 4 for another inch.

More than two colours are rather difficult to weave in corduroy. We shall have either poor pile, or difficulties in cutting. As an example of the first we can take a plain overshot draft (fig. 10), and treadle as follows: 6w, 5b, 4b, 3r ("w" - white, "b" - black, "r" - red) with alternate binder 1 or 2 after four shots of pile weft. One row of pile will be pure black, one - black-red, one white-black, and one - white-red. The second block of pattern will be: 6b, 5b, 4r, 3w. The third: 6b, 5r, 4v, 3b. The fourth: 6r, 5v, 4b, 3b. The pile will be only half as thick as usual, but we may cut both sides.

An example of normal pile with four colours, but difficult to cut is shown on fig. 11. Treading: 1-st block: 6b, 5r, 4b, 3w; 2-nd block: 6r, 5b, 4v, 3b; 3-rd block: 6b, 5w, 4b, 3r; 4-th block: 6w, 5b, 4r, 3b. Binder after each four shots of pile weft.

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Finally we have the possibility of combining corduroy with the locked wefts technique (MW No. 4, page 7). There is very little to be said on this subject. We use any draft, tie-up, and treading directions suitable for corduroy, but build the pattern by interlocking two wefts of different colour in each shed. Any pattern can be used. The outlines of the pattern will be blurred, because of the cutting. Three colours can be used in one shed as described before.

The colour of the warp and of the binder should be about as dark as the darkest shade used for pile.

We mentioned already once before, that not necessarily all the pile must be cut. When using more than one colour we can try to cut only one colour leaving the other flat. This is difficult with fine and involved patterns, but quite easy when the blocks are large and simple, particularly in case of locked wefts.

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**WEAVING TERMINOLOGY.**

Weavers are often at a loss how to call directions for weaving with looms which have no tie-up. Since many of these looms have no treads either, we cannot use the term "treading". The proper expression is "Lifting Plan". Another term "Tread Plan" applies really only to the power weaving. Lifting plan can be either graphical as in fig. 1 or numerical:


In the graphical lifting plan the first column from the left corresponds to the frame No. 1, second to No. 2, etc.