PROBLEMS IN TEACHING

VARIATIONS ON ONE THREADING

One of the greatest achievements from the point of view of a beginner, and often not only from his point, is to thread the loom, correct the mistakes, and in general - get prepared for weaving. Consequently the progress in mastering different weaves is comparatively slow at first, even if the student is very good at the theory of weaving.

Thus such weaves or groups of weaves which may be woven on the same warp without re-threading, and with only small changes in the tie-up, must be of interest to every teacher - and practically every advanced weaver is a teacher by profession or hobby.

As an example of what can be done with one threading, we selected a modern draft for 10 x 10 huckaback.

In the first place the student will have to understand the principle of huckaback weaves. Huck is a typical "woven-as-drawn-in" weave, whose repeats of threading and treading are identical in length and order. In practice this means that one side of the fabric is identical with the other after it is turned by 90°. The repeats can have other 6, 10, or 14 threads in both directions. Thus we have 6 x 6, 10 x 10, or 14 x 14 huckaback. The threading draft can be written in several ways (fig.1) but this does not affect the fabric in any way.

\[
\begin{array}{ccccccccc}
  x & x & x & x & x & x & x & x & x \\
  a & x & x & x & x & x & x & x & x \\
  b & x & x & x & x & x & x & x & x \\
  c & x & x & x & x & x & x & x & x \\
  d & x & x & x & x & x & x & x & x \\
\end{array}
\]

Fig.1

\[
\begin{array}{ccccccccc}
  x & x & x & x & x & x & x & x & x \\
  x & x & x & x & x & x & x & x & x \\
  m & m & m & m & m & m & m & m & m \\
  m & m & m & m & m & m & m & m & m \\
  m & m & m & m & m & m & m & m & m \\
  n & n & n & n & n & n & n & n & n \\
  n & n & n & n & n & n & n & n & n \\
\end{array}
\]

Fig.2

\[
\begin{array}{ccccccccc}
  x & x & x & x & x & x & x & x & x \\
  x & x & x & x & x & x & x & x & x \\
  x & x & x & x & x & x & x & x & x \\
  5x & 36x & 5x \\
\end{array}
\]

Fig.3

We shall use in this case the last draft (d on fig.1). The tie-up, treading and draw-down is shown on fig.2.

The woven piece must have some kind of borders. If only huckaback were woven we could have tabby borders by threading the edges: 1 4 1 4 etc. But since we are going to use this threading for several weaves, the edges will be as on fig.3. The number of repeats given on the draft should fill about 12 inches in width with 2/16 mercerized cotton set at 32 ends per inch.

Now here is the list of weaves which can be executed on this threading with changes in the tie-up and the treading only. We give a short description of each weave, as well as the draw-downs.
1. Huckaback.

The only huck which we can weave will have to be 10 x 10 of course. The draw-down is as in fig. 2, but for practical purposes the tie-up should be changed, so that both feet can be used alternately (fig. 4). The treadling with this new tie-up is: 1 3 1 3 4 2 4 2 4. Huckaback has a very peculiar texture which shows best when we look at a woven piece against the light. There are tiny slits which run on a diagonal in both directions.

2. Turned Huckaback.

Ordinary huck has floats running in one direction on one side of the fabric, and in another on the back. If for any reason we want to have floats in both directions on the same side, we make one half of the repeat as before, and "turn" the other half (fig. 5).

But, since both halves of the repeat are based now on the same tabby shed (treadle 4), they must be separated with an additional shot of tabby on treadle 2. Thus the repeat in treadling is longer than in threading, and to square it we must beat a little harder than usual.


Here it is only the principle of M's and O's which we use. The result looks more like Huck on one side and like M's and O's on the other. The texture here is a little softer than in case of huckaback, otherwise the weave is of little interest.


This can be considered as a farther development of Turned Huckaback. The floats here are longer (7 instead of 5) and they form squares on one side of the fabric. The repeat is again longer in treadling than in threading.

5. Double Waffle.

This is a very attractive and practical weave. Very similar to the plain waffle, has two instead of one float around each square. The floats form more ties with the ground, thus the weave is much firmer. Then both sides are identical, so that the fabric is reversible. When weaving it attention must be paid to good squaring, and the beating must be
rather not too heavy.

6. Huckaback Lace.

This weave has been already described in the 4-th issue of MW.

The lace opens during weaving, and not after washing as in Spot-Lace, and any yarn can be used.

Huckaback lace is called sometimes False Basket. Then a stronger colour should be used in threading on frames 2 and 3, and in weaving on treadles 1 and 4. Thus the floats stand out on a background of less striking colour, and give an effect similar to the Basket Weave.

7. Paper Spot.

We use here this name because we do not know a better one. Original Paper Spot Weave has been used for rather involved patterns, and in our case we get only texture, but the principle is the same in both cases. The fabric woven in this way is very soft. Very interesting effects are obtained, when using four different colours: 1-st for frames 2 and 3, 2-nd for frames 1 and 4, 3-rd for treadles 2 and 3, and 4-th for treadles 1 and 4.

8. Overshot.

This of course will be a texture based on overshot principle, not a pattern weave. It is woven with one shuttle only. One treadling is given with the draft. Another variation may be:

6 2 5 1 6 4 5 4 6 4 5 3. The number of pattern shots depends on the grist of weft. The small spots should be approximately square.


As a rule overshot woven on opposite sheds does not give satisfactory results, because of the different lengths of floats. Here it will work much better since all the floats are of the same length. Examples of treadling (draft on fig.11):

1) 1 2 1 2 1 2 1 4 1 4 1 4 1 4 1 4.
2) 2 4 2 4 2 4 2 4 2 4 2 4 5 6.
3) 3 4 3 4 1 3 4 3 4 2.

All these fabrics will be rather heavy. The warp will be partly visible, and no attempt should be made to cover it. Thus we shall keep to the usual sett of warp, instead of making it very open. The beating too should be quite normal.
10. Corduroy.

This weft-pile fabric called sometimes Velveteen (but not Velvet) is probably the easiest to make. It has a number of special drafts, but it can be woven on our threading as well. For best results a special soft weft (wool, pearl cotton) should be used on treadles 3 and 4, and a strong thin weft on treadles 1 and 2. The colours of warp and both wefts must be similar if not the same. The floats are cut (to form the pile) either on the loom or later on. Very sharp scissors with rather narrow blades must be used. When cutting one must be careful not to pull out the already cut floats. By cutting only parts of the fabric, and leaving floats in other places, interesting patterns can be made.

The loom used for this project should be either good jack-type, or a counterbalanced one with a shed regulator. Only 3 tie-ups in the whole series are suitable for plain counterbalanced looms. However if only weaving of samples is projected, all weaves can be made on a counterbalanced loom with a certain care, but not at a great speed.

The weaves have been described here in a certain logical order, but this order may be changed so as to save time in making the tie-ups. For instance on the standard tie-up for overshot, we can weave as well M’s-and-O’s and Huckaback Loco. The corduroy and plain buck have the same tie-up. Turned M’s and O’s, and Double Waffle can have the same tie-up if all 6 treadles are tied, just by adding the other tabby treadle to the Waffle tie-up (fig.13). Such combined tie-ups are quite suitable for weaving of samples, but when a longer piece is being made, it always pays to make the proper tie-up. For teaching purposes it is advisable to take up the weaves in such order as to be able to point out their similarity, relationship to each other, and development into derivative weaves.

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WEAVING TERMINOLOGY

Some mistakes made in weaving have very interesting even if obsolete names. Thus:

BLOTCH or SCOB - A place in the fabric where the shuttle missed one or more warp threads, and thus produced floats in weft. The origin of both expressions is doubtful. Blotch may be colloquial corruption of Blot. Scob might come from Latin scobis (sawdust).

JISP - is the result of uneven beating, and means the same as SHIRE. The origin of the first is unknown, the second comes from old English. It meant something thin and scanty.

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