

SOLVING THE MYSTERY OF THE STRANGE DRAFT

By Mary E Black

So — you have been given a draft by your Guild Program Committee from which you are to weave a sample for the next meeting. There is no tie-up with the draft, no treadling directions, no draw-down, no picture, no sample.

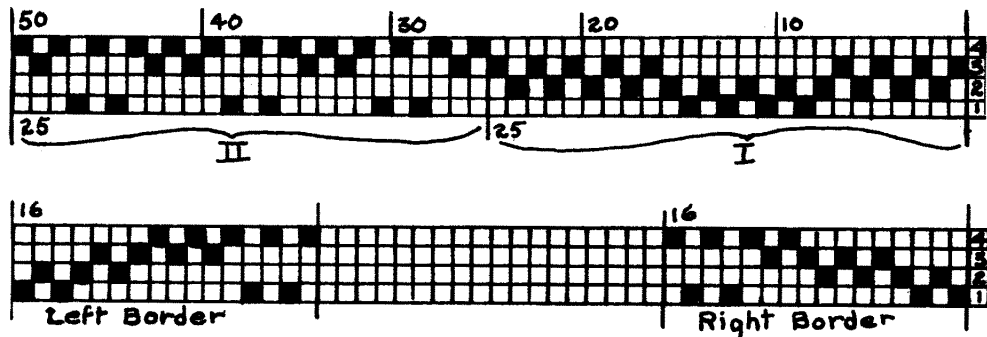
Are you one of those weavers who gives such a project a quick glance, shrugs a shoulder, mutters, "I can't do that," and tosses the draft into a drawer or back at the committee and goes your way? If your answer to this question is, "Yes," then go right back and get the draft, graph paper, some coarse thread and your loom, because you can solve the mystery of that strange draft *if* you really want to. The steps to follow as they develop logically one after the other are not difficult.

Step 1.

Here is a draft such as could have been given you at your Guild meeting. A clue to the origin of the draft comes from the notations *V. bord* and *H. bord* at each end. These are obviously Scandinavian, probably Swedish, and no doubt refer to borders. Our inference that the draft is Swedish is backed up by the method of writing the draft with harness number 4 at the front of the loom and harness number 1 at the back, a situation which is obvious from the way the draft starts and ends at the top and has a backward motion at beginning and end, even if the harness figures were not given.

Step 2.

To save confusion and bring the draft in line with the method to which we are accustomed, transpose the draft to read:



Step 3.

Encircle the draft blocks, naming them:

- Block A—harnesses numbers 1 & 2
- Block B—harnesses numbers 2 & 3
- Block C—harnesses numbers 3 & 4
- Block D—harnesses numbers 4 & 1.

Step 4.

Test the accuracy of the draft by making a profile draw-down.

A profile draw-down is one in which the blocks are not squared as in a regulation thread-by-thread draw-down. In the profile draw-down shown here under the transposed draft, the heavy lines represent the key blocks, blocks which determine the number of shots to be woven on any specific treadle when weaving-as-drawn-in.

Step 5.

From the draw-down the treadling is also determined. At the right of the profile draw-down will be seen a row of figures which indicate that:

- harnesses 1 & 2 depress to weave block A
- harnesses 2 & 3 depress to weave block B
- harnesses 3 & 4 depress to weave block C
- harnesses 4 & 1 depress to weave block D.

It is a logical step now to:

- tie harnesses 1 & 2 to treadle 1
- tie harnesses 2 & 3 to treadle 2
- tie harnesses 3 & 4 to treadle 3
- tie harnesses 4 & 1 to treadle 4

for a sinking shed (counter-balanced) loom. The opposite would be true for a rising shed (jack) loom. In chart form the tie-ups would appear:

Sinking Shed

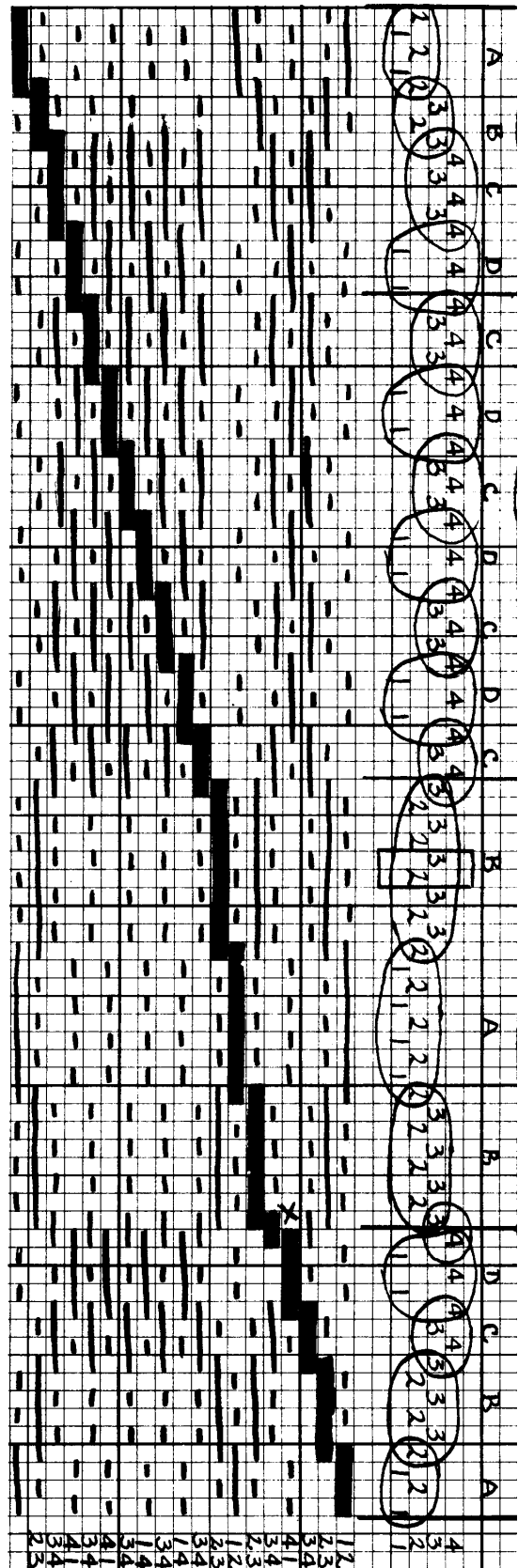
	1	2	3	4	a	b
4						
3		X	X	X	X	X
2	X	X	X	X	X	X
1	X	X	X	X	X	X

Rising Shed

	1	2	3	4	a	b
4						
3						
2						
1						

If your loom is a table loom use:

- levers 1 & 2 together
- levers 2 & 3 together
- levers 3 & 4 together
- levers 4 & 1 together.



The tabby or binder thread is not shown on the draw-down but as one is required, as we shall see later, it is logical to assume that the harness combinations 1 and 3, and 2 and 4, form the tabbys. They are recorded on the tie-up chart as *a* and *b*.

Step 6.

The profile draw-down reveals a two thread skip where the border, ending with a D block, joins the first pattern block which is on D. This is done sometimes to set a border off from the pattern more strongly. In weaving, the two-thread 4, 3 combination is best ignored rather than woven as part of the pattern.

Step 7.

So far we have little idea of what the finished web will look like. The profile draw-down reveals that it is a twill derivative and because several repeats of the twill sequence are used to form blocks the conclusion can be drawn that it is an Overshot.

The draft shows a right and left border, which was established by looking up the word *bord* in the Swedish-English dictionary, with two pattern units between. The right and left sides of unit number I do not balance. The B block on the right has a total of eight threads while the B block on the left has a total of ten threads. Unit II balances.

Previous experience with overshot drafts would suggest to us that a ten thread skip is too wide and would be too easily caught in the fingers and buttons, and the web would not be durable.

At this point there are two ways in which to find out what the design is like. First, complete draw-down (weaving on paper) can be made, or second, a sample can be threaded and woven on the loom. The first is a valuable method which is highly recommended but since the profile draw-down has revealed the errors in the draft it does not seem necessary to make a thread-by-thread draw-down. A woven sample has the added advantage of showing up the relationship between the color and the texture of the threads.

Step 8.

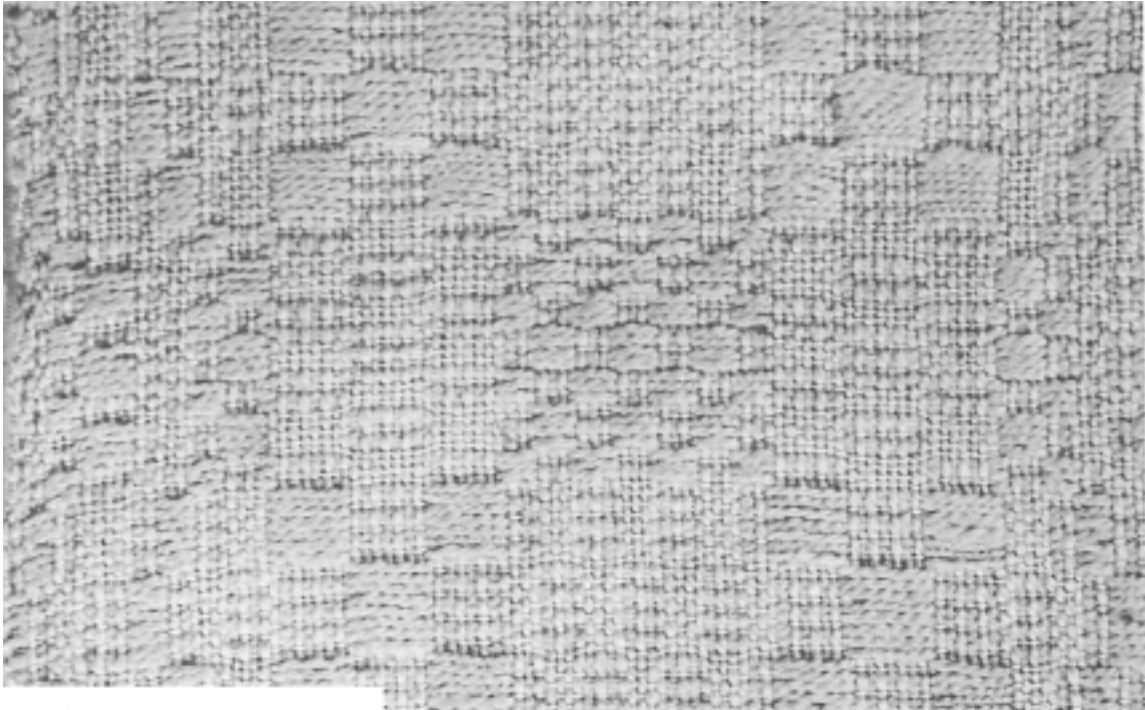
For the sample use:

Warp 8/2 cotton, weft 16/2 or 20/2 for tabby and 8/2 for pattern. In an 8-dent reed, triple sley, or in a 12-dent reed, double sley, for 24 ends to the inch. This combination of threads and sleying produces a satisfactory result when squaring the blocks and is coarse enough for easy study. Use threading draft from step. 2. Thread:

Right border — repeat twice.

Pattern — Units I, II, I.

Left border—repeat twice.



Treadle as-drawn-in; that is:

Treadle 1—3 times	Treadle 4—4 times
Treadle 2—5 times border,	Treadle 3—4 times unit II
Treadle 3—3 times repeat twice.	Treadle 4—4 times weave once.
Treadle 4—4 times	Treadle 3—4 times
Treadle 1—7 times unit I	Treadle 4—4 times
Treadle 2—7 times weave once.	Treadle 3—3 times
Treadle 1—9 times	Repeat unit I.
Treadle 3—3 times	Border (repeated backwards) twice.

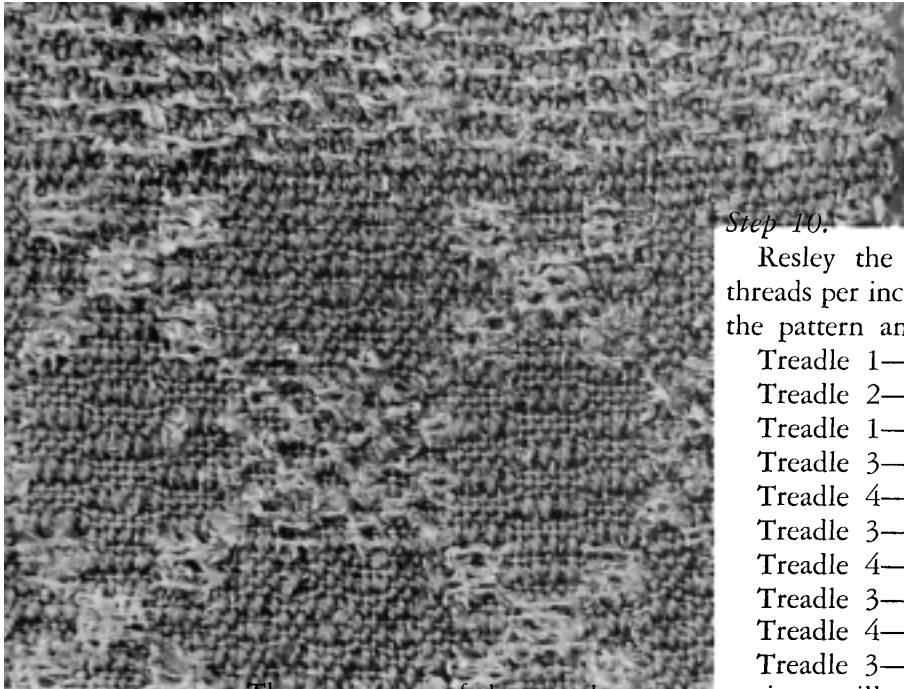
The errors in the threading show up very plainly on the left and right of the stars, Unit I. However the design shows well. The diagonal is slightly high, as an Overshot, woven-as-drawn-in should be exactly 45° . This weight of material is suitable for place mats for general use.

Step 9.

Now, having seen the pattern actually woven, it is time to make adjustments. First, balance the two sides of the star by omitting the 2 and 3 enclosed in the rectangle on the original draft. Pull out the extra two threads from each star and re-sley the warp. The only treadling change required is in unit I, which becomes:

Treadle 1—7 times
 Treadle 2—7 times
 Treadle 3—7 times.

There is nothing particularly interesting or unusual about the pattern as it has developed from the unknown draft. The design, by nature, does not lend itself too well to further development, but various materials can be experimented with.



Step 10.

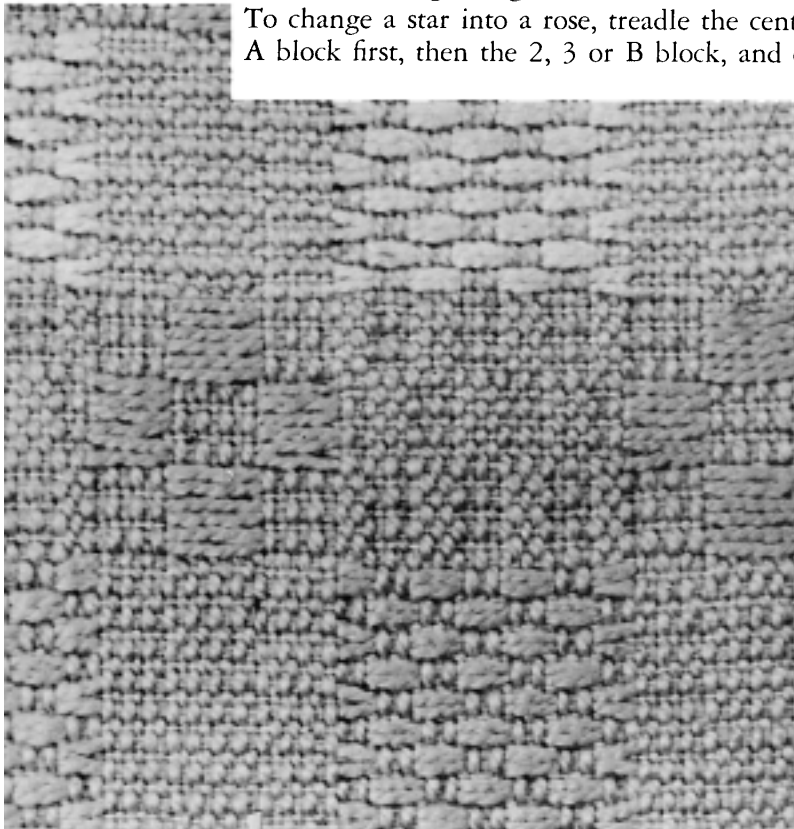
Resley the warp, setting it at 30 threads per inch. Use a rayon boucle for the pattern and weave with tabby:

- Treadle 1—4 times
- Treadle 2—4 times
- Treadle 1—4 times
- Treadle 3—2 times
- Treadle 4—2 times
- Treadle 3—2 times
- Treadle 4—2 times
- Treadle 3—2 times
- Treadle 4—2 times
- Treadle 3—2 times

The upper part of the sample was woven in a twill succession: 1, 2, 3, 4, repeated without a tabby. This produces a web suitable for bath towels.

Step 11.

No particular attention has been paid to the borders on the samples as borders must always be designed to fit the size of the article being woven. The border threads, at this point, are withdrawn. Two threads are also withdrawn from each A and each B block to make a shorter skip or float in the stars. The border threads are threaded as unit II, at each side.



A treadling change which is now made is to treadle unit I in Rose fashion. To change a star into a rose, treadle the center block, in this case the 1, 2 or A block first, then the 2, 3 or B block, and end with the A block. Following this change an entirely new effect is achieved, a design which is immediately recognized as a Swedish daldrall variation. The photograph shows the warp re-threaded as indicated above, but set and woven as for the boucle sample with the exception of unit I which is woven:

- treadle 1—6 times
- treadle 2—6 times
- treadle 1—6 times.

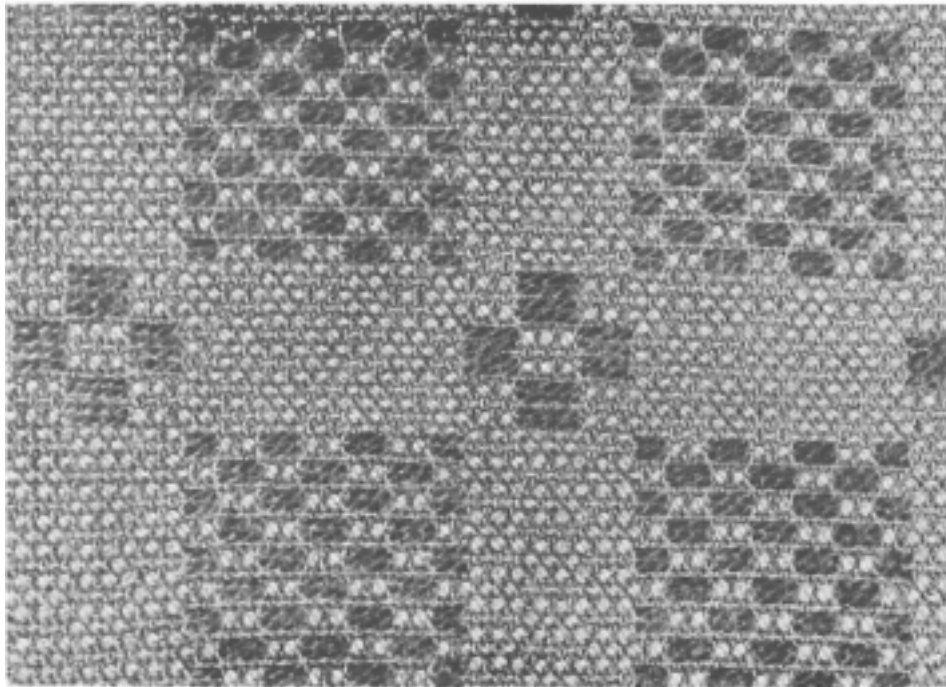
Two colours can be used to advantage in this weave: two shades of one colour are preferable.

Step 12.

Rayon 8/2 sleyed three per dent in a nine-dent reed makes a material suitable for place mats, bags, bureau covers, etc. If sleyed more loosely it would be suitable for drapes or skirts if used for a border at the bottom. Areas of plain weave can be woven in between the pattern areas. No attempt has been made here to show design arrangements. It is the structure of the weave and its development which are paramount.

In this sample the A and B blocks have been shortened to six threads each by withdrawing 2 threads from each block. This reduces the rose figure making a better contrast between units I and II. The A and B blocks forming the rose or unit I are treadled four times each, and the C and D twice each in alternating succession until nine blocks have been treadled to form the table.

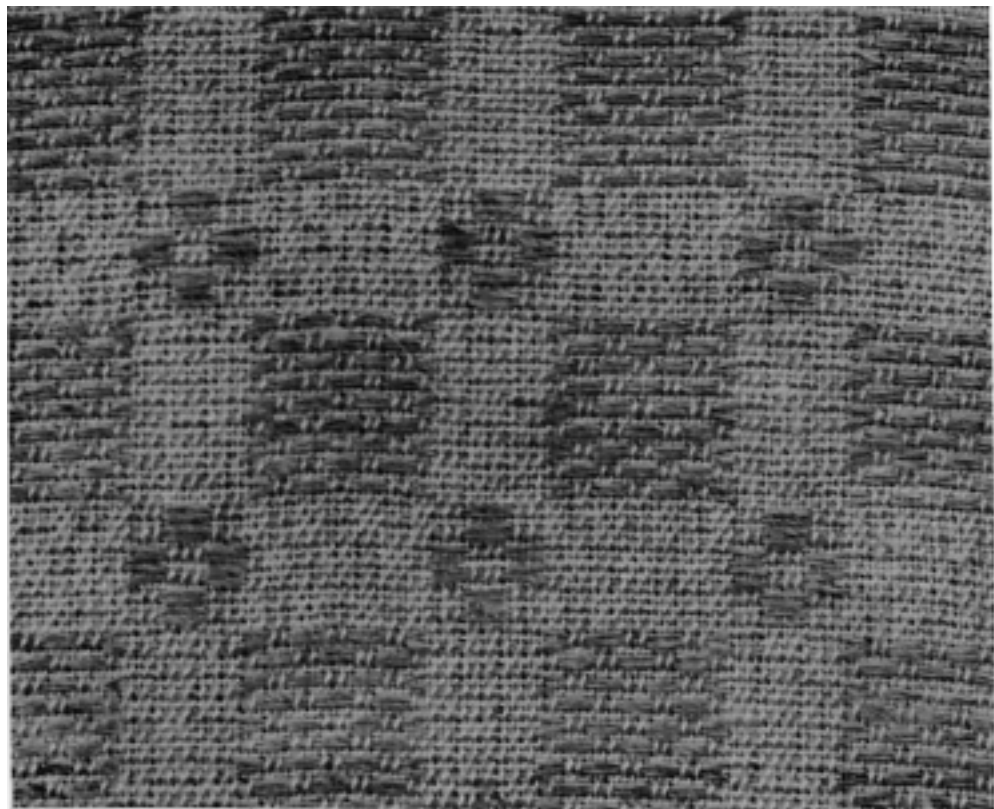
Traditionally Swedish daldrall is woven with the same material for warp tabby and pattern. This requires a slightly wider or coarser sleying than when a fine tabby thread is used.



Step 13.

Having recognized that this is a daldrall variation, and that the daldrall is traditionally a linen weave, the next sample is threaded with warp of 40/2 linen half-bleach, tabby weft of 40/2, pattern of 40-singles unbleached. Sley three threads per dent in a 15-dent reed. The threading, treadling and draw-down are shown below, and the resulting fabric.

A musical score on a grid. The top staff contains fingerings: 3 3 3, 2 2 2, 2 2 2, 2 2 2, 2 2 2, 3 3 3, 3 3 3, 4 4 4, 4 4 4, 4 4 4, 4 4 4, 4 4 4, 4 4 4, 4 4 4, 3 3 3, 3 3 3, 2 2 2, 2 2 2, 2 2 2, 3 3 3, 3 3 3, 4 4 4. The score is divided into three sections labeled I, II, and I. Below the staff are chord diagrams for various chords, with labels on the right: 1-3X, 2-3X, 1-3X, 3-2X, 4-2X, 5-3X, 4-2X, 3-2X, 1-3X, 2-3X, 1-3X.



When beaten back compactly, the web at this setting is apt to be a bit hard, but it is suitable for place mats. It will soften when laundered.

It will be recalled that the original draft showed ten threads at the left side of unit I with eight threads on the right side. This showed up in both the profile draw-down and the first woven sample, but was then changed. In the Swedish draldrall, defined by Ulla Cyrus as "Overshot from the province of Dalecarlia, Sweden," no particular attention is paid to balancing the blocks. This unbalance appears here and is seen in many Scandinavian pieces. We cannot call this an error, as it is their accepted method of threading these weaves.

The mystery of the unknown draft has been solved. Having followed the various steps carefully as they applied to this four-block draft, it should not be difficult to apply the same principles to any unknown draft. The key to the whole mystery is the draw-down. It holds the clue to the treadling, the tie-up and, when drawn in the thread-by-thread method, gives a picture of the finished pattern, woven-as-drawn-in. From this picture the imaginative weaver can proceed to weave a variety of designs with a variety of threads and colours until, from an unknown draft there will emerge a completely satisfying web.

