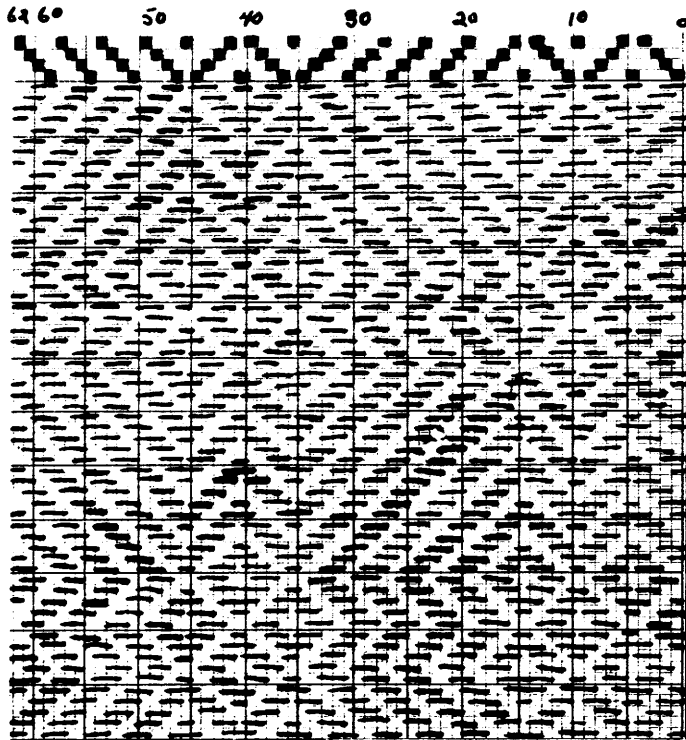


DRAFT NO. IV.

Designed by Mrs. Evelyn Lauer.



Thread the No.600 loom as follows;-

1,2,3,4, repeat 3x, then 9 pattern repeats as given at the right, then to end thread the first 30 threads of the draft. This takes up 600 threads, or 10 spools of 40/2 linen. Weft used was No.14 half bleach.

Only one shuttle was used and no plain tabby shots were used, Just one shot on each pattern shed in the order as given below, for levers of Struoto table loom.

Treading;-

3-4,1-4,1-2, 2-3, repeat 4x. Then 3-4,1-4,3-4,2-3,1-2,1-4,1-2,2-3, 3-4,1-4,3-4. Now 2-3,1-2,1-4,3-4, repeated 4x. Then 2-3,1-2,1-4,1-2, 2-3,3-4,1-4,3-4,2-3,1-2,1-4,1-2, 2-3. Repeat from the beginning until of the desired length.

This would also make an attractive luncheon set woven of 40/2 linen like the warp. Bags would be nice woven on the same warp of rayon or fine silk chenille, or of fabri yarn.

(Note that the pattern is twill combined with "Rose-path" as described in the June News.)

Designing Four Harness Loom Patterns

by NELLIE SARGENT JOHNSON

(Special Instructor in Weaving, Wayne University, Detroit, Mich.)

Designing ones own pattern drafts is always interesting. In fact I know of nothing more exciting than to plan, thread up the loom, and then weave a pattern which evolved from your own self, even though that pattern be of the very simplest kind.

This method of designing is based on variations of twill, herring-bone, and rose-path threading drafts, and it is my purpose to try and show you how very simple it is to create your own threading drafts by using these as your basic drafts. If you once understand how to do this many other possibilities will occur to you as you work out the drafts. The first description of this as a means of creating new patterns, was written up in Handweaving News for June 1936, a monthly leaflet on weaving. This has been so helpful to my own students in learning how to draft their own patterns, that it gives me much pleasure to send it out to further usefulness.

Let us start with the simple four harness twill, which should be familiar to every weaver. This is just one thread on each harness, 1,2,3, and 4, repeated all across the width of the loom. Herring-bone, or reversed twill is 1,2,3, 4,3, and 2; one thread on each harness, repeated all across the width of the loom. And the so called "Rose-path" or "Rosengang", to use the Scandinavian term, is as follows;-1,2, 3,4,1,4,3,2,

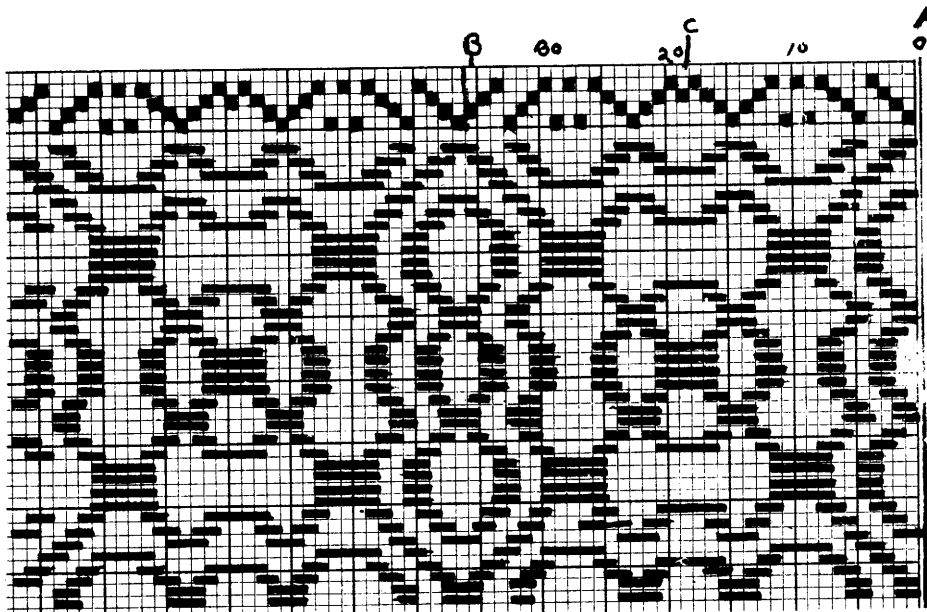
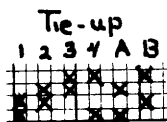
repeated one thread on each harness for the width of the loom. Now with pencil and cross section paper, write 1,2,3,4, or twill, then write 1,2,3,4,3,2; which is the herring-bone or reverse twill; then write 1,2,3,4, 1,4,3,2, which is rose-path. This is shown at Draft No. 1; A group is your twill, B group is herring-bone, and C group is the rose path.

Now this could be used as a repeat just as it is, but in order to have the draft balance, note that the thread on harness 1 at C can be used as the center thread of the repeat, and the pattern continued in reverse from this as a center. Group D is herring-bone repeated as at B, and E group is the twill which was written at group A. Now if you continue, you will see that this is one full repeat, but that the last twill ends with a thread on harness 2. The reason for this is that if you add a thread on harness 1 to complete this twill, and then repeat your pattern, as you wrote it exactly at the beginning, you would have two threads together on harness 1. When you repeat your pattern, be sure you do not have two threads come together on the same harness, and it is always best to write out two full repeats of your pattern to see that it is correct. Also be sure and note your center threads carefully, and write your pattern on each side of this center. In this pattern Draft No. 1, you will see that when it repeats back from the begin-

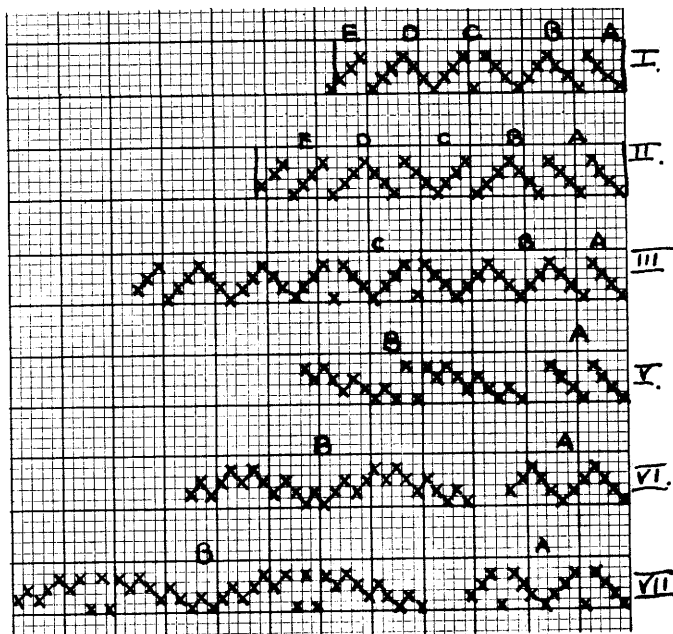
"HEARTS AND FLOWERS". DRAFT NO.VIII. Designed by Marie Copland.

To weave this pattern on the Structo loom, use levers as follows,-
 34-1,14-1,12-1,23-1,
 34-1,14-1,12-1,23-4x,
 12-1,14-1,34-2x,14-1,
 12-4x center,repeat
 back to beginning in
 same order.

From A to B is one repeat of the pattern. C marks the center of the pattern. Two repeats are given.



VARIATIONS OF TWILL, HERRINGBONE AND ROSE-PATH



ning, you will have another center for the draft at thread No. 1, where you begin your next repeat. You can use these three basic threadings in any order you wish, and also repeat them as many times as you wish. At Draft No. 2, the twill is repeated twice in group A, herringbone once in group B, then the herringbone is reversed at C group. The D group is the same as B, and E group is the same as A which is the twill repeated twice.

Note the centers of Draft No. 2 at thread 19, and at thread 1 where the pattern begins. Draft No. III. has one repeat of the twill, two repeats of herring-bone, two repeats of rose-path, then two repeats of herringbone, and one twill as at the

beginning, but this last repeat of twill has the last thread omitted so as not to bring two threads together on harness 1 when the draft is repeated. Note that the center of the draft is at thread 25, and also at thread 1.

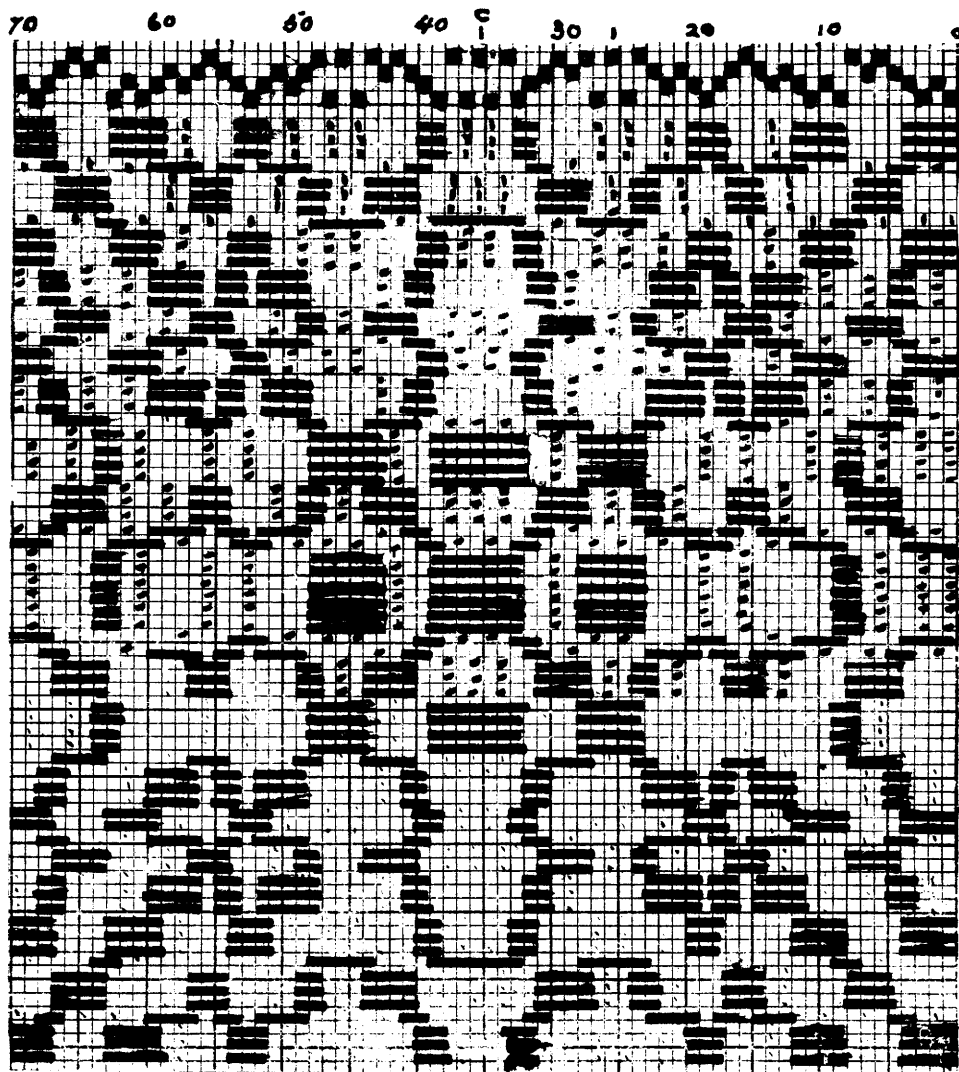
Draft No. 4 was worked out by Mrs. Evelyn Lauer, one of my students drafted this from a photograph of the wedding linen of Sidney Howland, of Mayflower decent. This textile is on page 76 of the book "Early American Textiles" by Frances Little. Mrs. Lauer drew the draft from the photograph and used it for linen towels. Note how even the old drafts were based on this same idea. You can easily pick out the combination of twill and rose-path threadings in this draft. Simple threading drafts such as these are very useful for many things. Bags, linens, upholstery fabrics or any fabric where you wish a short skip, can be woven in this way, using any combination of these three basic threadings.

The next step is to write pattern blocks of different sizes to get more variations into the pattern. At Draft V. is shown two repeats, of twill at A. At B, is the same thing but each pattern block has four threads instead of just two. The pattern blocks on a 4 harness loom are made up of combinations of harness 1 & 2, harness 2 & 3, harness 3 & 4, harness 4 & 1, with the plain weave on harness 1 & 3, and its opposite 2 & 4.

Draft No. VI. shows two repeats of the simple herringbone at A, and two repeats of the same thing at B except that each pattern block is increased by two threads. Note this draft *carefully*, at the block where the pattern reverses, or repeats back, this pattern block is always an odd number of threads. The smallest number of threads which can be written at the point where a pattern reverses is a three thread block, the next largest must be a five thread block, the next seven threads and so on. You can make this block no smaller than three threads, it can be as large as you choose to write it, but always an odd number of threads. At Draft No. VII, rose-path is increased at B to four thread blocks, the only difference there will be when these drafts are woven, is that the over-shot skips will be longer than the drafts at A, of V, VI, and VII. You can write your pattern blocks with as many threads as you may

This pattern would be attractive for bags set at 15 threads to the inch. carpet warp with Germantown or Knitting yarn for the weft. Or if desired can be set at 30 threads to the inch in fine warp as No. 20 mer cotton, 20/2 cotton, or 40/2 linen. At this setting would make excellent upholstery material. All of the one thread skips are not drawn out on the diagram at the right but just enough to show the effect.

To weave as the pattern is drawn out, -
 34-3x, 14-1, 12-3x, 23-1,
 34-3x, 14-3x, 12-2x, 14-1,
 34-2x, 14-3x, 12-1, 23-4x,
 12-3x, 14-1, 34-1, 23-6x; -
 center, repeat back in same order to beginning. This order of treadling is arranged for the levers of the Structo loom.



wish, but the pattern block on which the draft repeats back or reverses must *always* be of an odd number of threads. You can write your pattern blocks all the same size if you wish, but your patterns will be much more interesting and varied if you write your pattern blocks of different sizes. Note the variety of Draft VIII. "Hearts and Flowers," drawn by one of my students Marie Copland. From A to B is one repeat of the pattern, two repeats are given, and C marks the center of one repeat. And another center also occurs at thread one at the beginning of the repeat. This pattern is useful for many different types of fabrics, and can be used with almost any type of warp and weft. It is an excellent threading for linens or bags, and possible to weave a great many good borders with it.

Draft No. IX. is another pattern draft designed by Marie Copland. If you wish to get the full effect of this pattern, draw out two repeats of the threading, instead of just one as is given here. Note how the sizes of the pattern blocks have been changed to get the great variety. This "Snowflake" draft is attractive woven also. All of the single dots

representing the single over-thread skips were not drawn in on the lower half of this drawing.

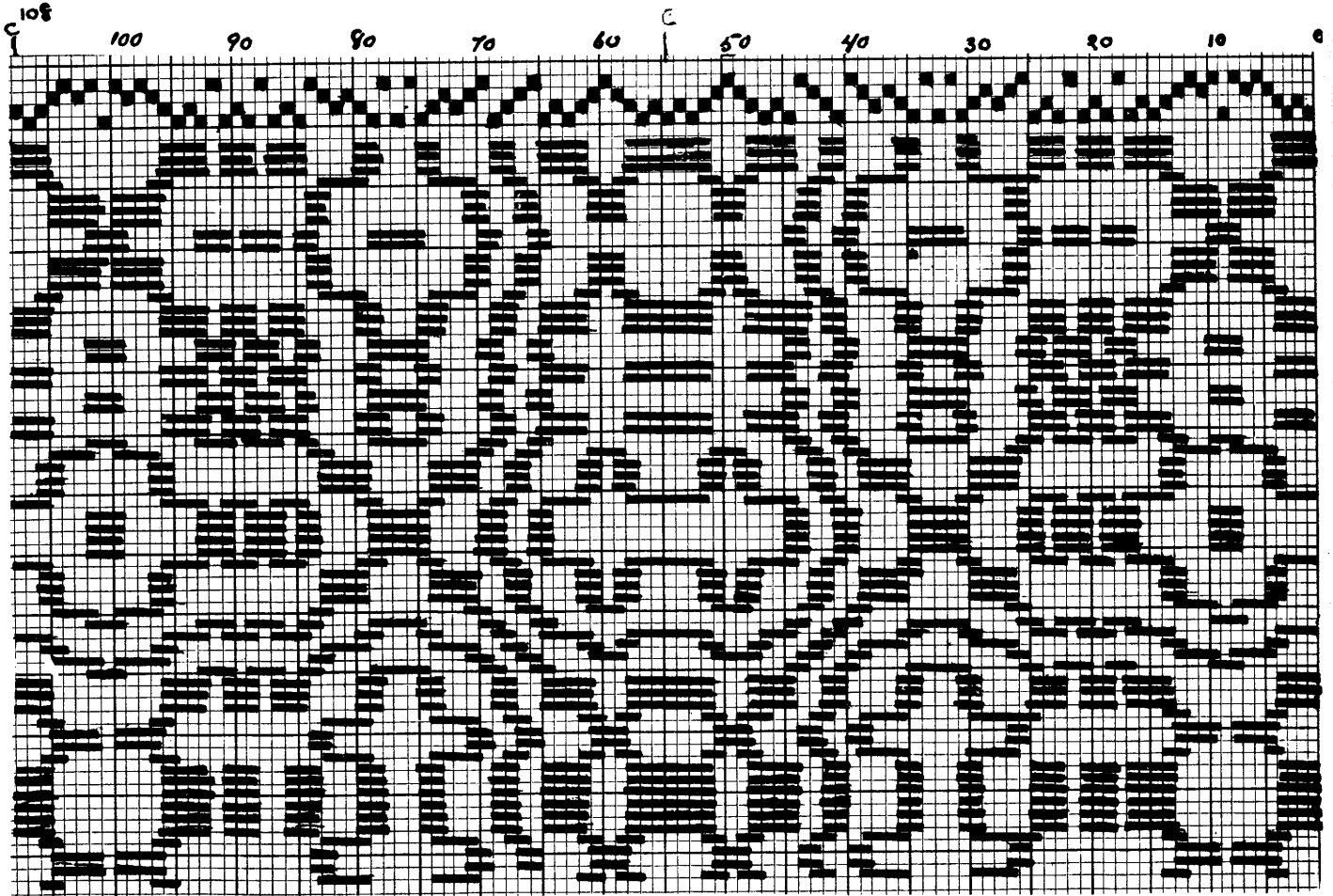
Draft No. X is "Copland's Fancy" or "Electric Light". It gives a rather odd effect, quite different from old Colonial drafts. The center of the draft is at thread 55. This pattern also needs to be written out with two repeats to show the full effect of the draft. On this draft note how the rose-path threading has been varied at the beginning, and also the repetition of the 1 & 2, and 1 & 4 pattern blocks at thread 16 to 26. It is always possible to repeat two pattern blocks in this way for variation. The old drafts contain many repeats of two pattern blocks, and are generally called "tables" if they are repeated enough times to have any considerable size. Also note at this point, that the repeat begins with a four thread block, and ends with a two thread block. The old patterns usually are written so they will balance, but she did not wish this to balance here.

Many other variations can be planned out using these simple basic threadings as a guide. No one who understands this kind of drafting need ever wonder what they can use

"ELECTRIC LIGHT" OR "COPLAND'S FANCY". DRAFT NO.X.

Designed by Marie Copland.

In this draft note how the rosepath threading has been varied at the beginning, and also the repetition of the 1&2 and 1&4 pattern blocks from thread 16 to 26, and the odd effect produced as the pattern is drawn out below.



for a new threading draft. This method of writing pattern drafts has been much easier to learn than the way in which I myself learned it, and the ideas for it came to me once when I was trying to see how small I could reduce some of the large Old Colonial drafts which were very large thread-

ings and with large pattern blocks. I hope this method will be helpful, and even if you are a beginner, or perhaps an advanced weaver, that you will try it out and see what you can do with it for your own new patterns. I will gladly answer questions concerning it, if anyone wishes to write me.