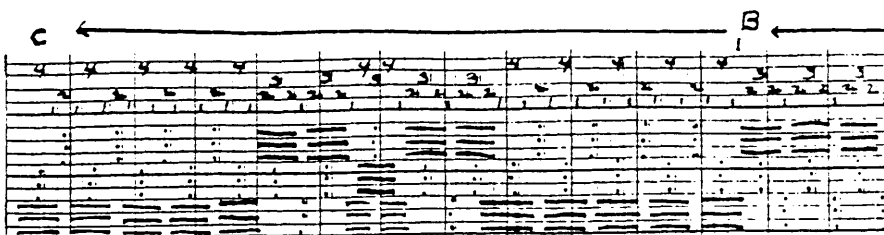
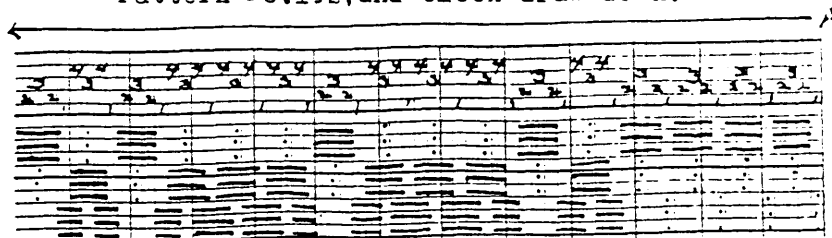
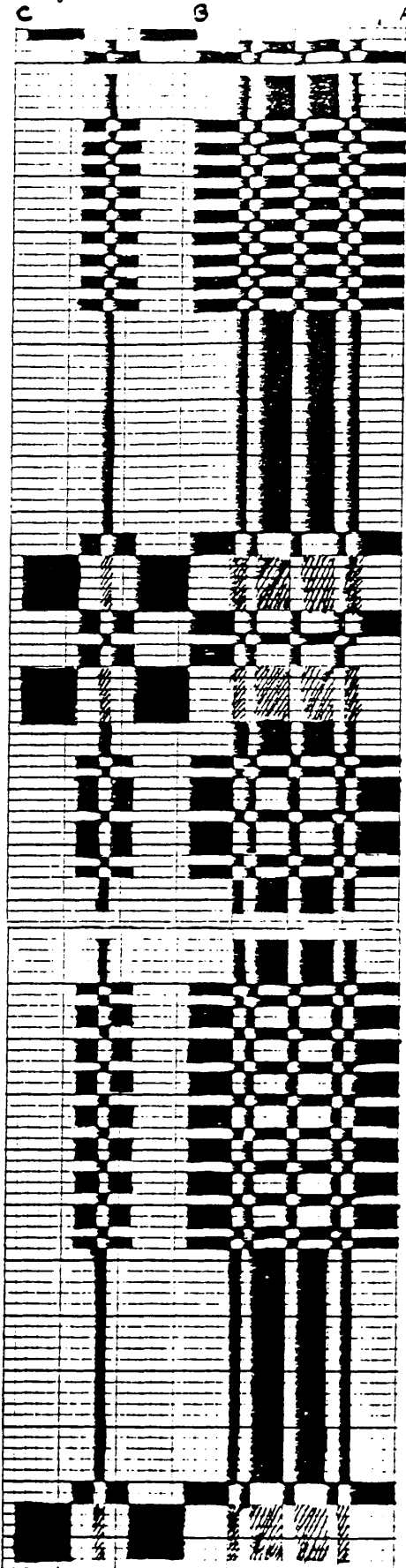


Key Draft for Pattern No.192

One repeat A to B for
Actual Threading Draft, "Crackle" Weave for
Pattern No.192, and check draw down.



Pattern No.192 shows two different ways of drawing down trees from the same key draft with different effect. This is gained in the weaving by changing the number of times the pattern blocks are woven. Note here that two pattern blocks are distinctly written "on opposites" with the third pattern block added and woven separately. The pattern blocks are 2&3, 3&4, and 1&4. The 1&2 block is not woven. The 2&3 and 3&4 blocks do not overlap which makes them very clear cut when woven. The shaded part on the key draft represents the 1&4 pattern block which does overlap 3&4 pattern block, and this will of course weave when the large 5 unit square blocks are woven. By using a different color here for these large blocks the tree pattern will stand out better. If desired for a border these large five unit blocks on 1&4 need not be woven.

"Summer and Winter" Threading drafts for any of these 3 block patterns can be woven on 5 harnesses very easily. Thread the pattern blocks as follows, - 3,2,1,2 for first pattern block; 3,4,1,4 for the second; and 3,5,1,5 for the third pattern block. Of course here you have no difficulty with the overlapping of the blocks as when trying to adapt these drawings to the "Crackle" weave threadings.

How to Plan a Pine Tree Border as at Pattern No.186.

AC

1. From the key draft, draw down 1 repeat of the pattern and ink in solid for the pattern effect desired.
2. From the center snowball drawn down under BC, draw a pine tree effect at the left as desired, but using the 2nd and 3rd pattern blocks only. The top of the tree in this, is on the 2nd pattern block, while the branches alternate with the 2nd pattern block and are on the 3rd pattern block. Alternate 2 and 3 for the branches and then repeat the 2nd as desired for the length of the trunk of the tree. Of course the first pattern block may be used at the bottom of the tree to separate the 2 and 3 pattern blocks as desired.
3. From the snowball design BC again, draw another tree below BC, exactly like the one at the left of BC.
4. Now write in the key draft for the tree on the left or DE, and draw in the small pine tree and the lower corner from this key draft. Take care and not get the 2nd and 3rd pattern blocks mixed up in doing this.

HANDWEAVING

NEWS

Handweaving as a Business.

A very common question often asked by the person contemplating the buying of a loom and the taking of weaving lessons is, "If I buy a loom will I be able to sell my weaving, or will I be able to make my living at it.?" This is a rather difficult question to answer, because its answer depends so much on the character and ability of the person asking it. And also the same business principles apply to weaving as to any other business.

Difference between Amateur and Professional Craftsman Weaver. Of course many people begin to learn to weave with no idea of ever turning this knowledge into even a part time proposition for additional income. The amateur weaves entirely for his own pleasure. He makes what he likes to suit his own needs, spends as much time doing it as he wishes, and should have a good time doing it. His weaving may serve as an outlet for surplus energy, or as a diversion from the daily routine of the home or office, and an opportunity to exercise one's own individuality for creative self expression in the making of things for his own home or for gifts. On the other hand, the professional craftsman weaver must weave to sell, and satisfy popular or specific taste and demand. With him, time means money, hence he must work out and know all of the possible short cuts to make his work easy and profitable. Often the amateur may become the professional, particularly if he is willing to study and work hard to know and understand all of the essentials pertaining to the craft.

Originality One of the most important things for the professional craftsman is originality. He must be able to develop his own ideas and weaving patterns. He must have a thorough knowledge of the loom and all of its possibilities. Craftsman weavers sufficiently skilled could easily lead the way for machine made fabrics through the development of new ideas and ways of using threads. But all too many handweavers have been too busy copying old Colonial coverlet patterns or Scandinavian weaving to develop anything new. These things have their own place and the amateur is often made very happy and has a feeling of real accomplishment through the weaving of this sort of thing. But the professional craftsman should never be satisfied to stop there, he should ever be on the alert to find new ways of working and develop new ideas and new patterns, or new threads for the using of old patterns, to develop an entirely new texture. A few years ago a California craftsman weaver developed on her hand loom a fabric for ^{summer} skiing, which was later put into production and nationally advertised by a sporting firm. It is in this way that a real craftsman can lead and show the way. There are a number of other things which aid one to develop originality. The first is the study of design and color, or an inherent feeling for it. Modern fabrics are emphasizing texture, so the craftsman should study and experiment with different kinds of threads and yarns for unusual combinations. Often times some materials native to a definite locality might be used to develop a definite specialty. At a recent exhibit I saw some most interesting textiles developed from Pima cotton from Arizona. I have since tried to obtain some without any success, though I understand this is native to Arizona. There is also a brown cotton in some sections of Louisiana, but this I am told comes from the cotton being picked after it has first been touched with frost. It cannot be used in commercial production, but is very lovely in both texture and color when spun by hand.

December 1940

Nellie Sarzent Johnson 12489 Mendota Detroit,

This matter of handspinning also is only justified for the professional craftsman when an entirely different kind of thread is produced either in color or texture from the manufactured product. And the same would hold true also for dyeing. Of course here too the question of cost of production of handspun or handdyed thread would have to be considered when one is weaving for sale.

Development of a Specialty. If one is weaving definitely with the idea of selling, they should work out their own specialty, generally they are more successful selling the kind of weaving they like best to do, but they should know all phases of weaving as well. For instance, let us take handwoven bags as a specialty. First we must learn all we can about the general market trends as to style, color, size, and shapes, current prices for better bags, for if we are to make any money we will have to aim for the higher price brackets, or else produce a large quantity of only one kind. What bag fittings are being used, kinds of lining, what kind of frames will we use and at what cost? All of these are questions which have to be considered and answered. To know what is being done in this field and to learn what the market trends and trade requirements are, one must subscribe to the Trade and Gift Shop magazines. It is necessary to know what other people are doing not with the idea of copying their work, but of improving ones own work. It should be a matter of ethics with every craftsman not to copy others work, but to design ones own, and at the same time know what others are doing in the same field. Also one must study the market to see if there is some thing the public is asking for, of which there is a limited supply. See what is the demand or what demand can be created in an open market. Sometimes the question may come up as to a thing being in or out of style. This was answered by a buyer for an exclusive shop as follows; - "After all we tell our customers what to buy by our displays and so help set the style." This is something which craftsman may well think a good deal about, for recognizing market trends is a most important part of this whole business of selling ones craft products.

Cost of Production. When ones objective is to sell, it is essential to produce an article as low in cost as is possible, and sell it for as much as is possible. Some of the items which make up this cost of production are the workroom and its loom equipment, and the overhead charges which include rent, light, heat, working time, etc. and some of the intangible values such as the time and effort of past years spent to learn to weave, or on the study of design and color etc. for which no salary was earned. The professional craftsman should endeavor to make the present pay for past effort and time as far as possible. Reputation is another intangible value, known more generally in the commercial world as business good-will. Certainly every one wishes to build up a good reputation and good will of the public. This is based on a number of qualities, but sometimes it seems as though it were a matter of luck by being taken up by the right people, or on a certain degree of showmanship. But I like to feel that the best results come from ones having a definite purpose and objective built up over a period of years. This is slow, but is dependable, sure, and best in the long run of things, it has seemed to me.

The Loom Room. As this is the workroom, care and thought should be given to its equipment and arrangement as to light, heat etc. There should be suitable closets for the storage of yarns and threads. Filing cabinets are useful for samples as well as for correspondence. Chests of drawers for finished work and book cases for reference books might also be considered as necessary furniture. And of course the number and kind of looms must be carefully chosen. The loom should be one which fits the type of weaving to be done. If heavy rugs are to be woven for sale the loom should be built to meet this requirement, or if linens only are to be done, this might influence one to choose a lighter easier loom to operate. For instance if a person is intending to weave dress material to sell, an example of an impractical loom to buy would be an upright tapestry loom. Always get the best and easiest loom to do the weaving you are planning to do on it, and keep it in good condition and repair. Winders, warp reels, bobbins and shuttles, reeds of several sizes should also be a part of good loom room equipment.

Materials. Materials are the threads and yarns of the weaver's stock and trade. One of the most important factors about this is the necessity for having reliable sources of supply where price is reasonable for the quality purchased. Keep a supply of sample cards and prices lists on hand always, and purchase in as large a quantity as possible, in order to get the best prices possible.

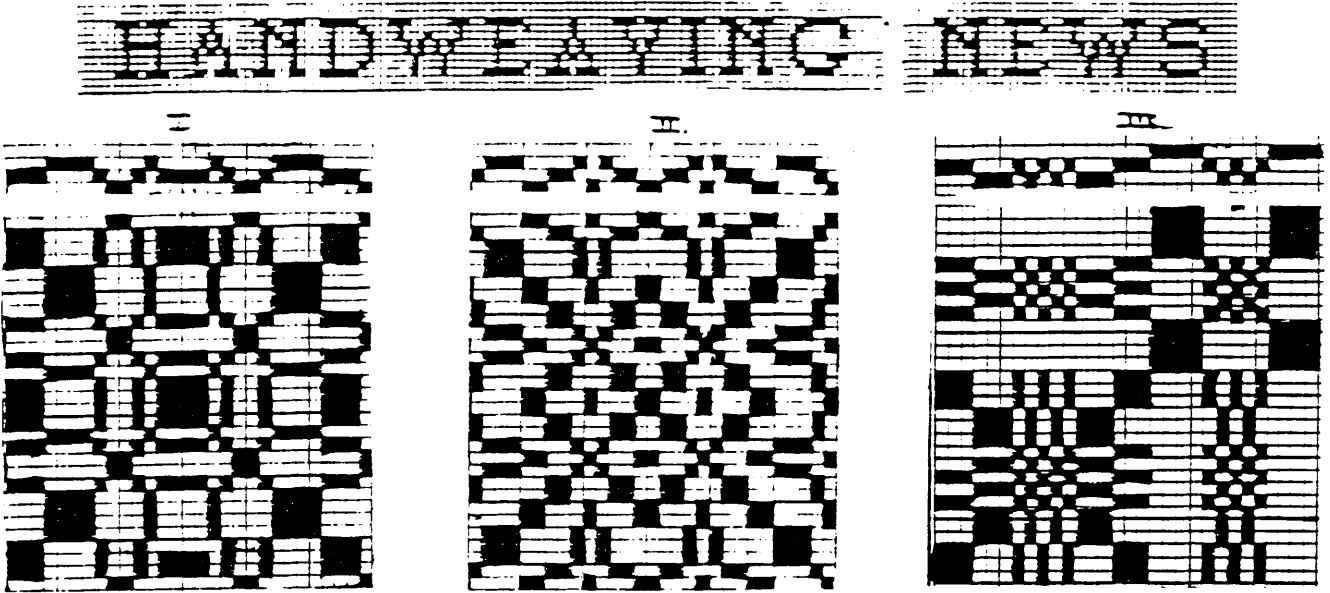
Have these sample cards and price lists filed and easily available for easy reference use. Record all purchases of yarns or equipment from each firm with the date, quantity, kind, price per pound and total amount expended, including postage or express.

Value of Time. The value to put on ones weaving time is difficult to solve. The amateur weaver usually reckons her cost of materials and hours of time spent, but never stops to consider if that time has any market value in a competitive market or not. Generally it has not. Recently I saw a handwoven coat, all the wool handspun and hand dyed, which had been woven on an 18" tapestry loom. It was marked for sale and the price \$1000. Now I knew, although the general public would not know, that this coat, from the point of the time spent in the making of it, might possibly be worth that much. But this price was ridiculous, because the woman who had the \$1000. to spend for a coat, would prefer something quite different from that one, both in style as well as quality. This question of time needs much study, for on this depends to a great extent whether it pays to weave a certain article for sale or not, the market for the article must be considered. Several years ago a wealthy customer of mine asked me to make a dozen fine all wool sheets, and came to me to see what I would weave them for her for. I told her \$50.00 each. She gave me the order and made an advanced payment of one half the purchase price at once. This might seem at first too much, but I know that for commercial ones she would have to pay \$40.00 each, and she wanted the handmade ones. They were woven of Bernat's finest Kashmir wool yarn and very beautiful when finished. The point is here that the market came to me. If I had woven those sheets first and then tried to sell them for \$50.00 each, the problem of finding the customer would have been practically impossible, which was the important factor in this whole thing. This brings us to the question of marketing of handweaving which will be later discussed. Careful time records should be kept on all articles made for sale. In estimating the cost of an article, figure in the time for setting up the loom and preparing to weave, the amount of warp required etc. Threading time and set up is generally easy to estimate at about 100 threads an hour for the width of the loom. Possibly some people may thread much faster than that. For a simple threading draft one could do it much quicker than a complicated threading with many changes.

Reckoning the Actual Cost of an Article. First consider the quantity, kind, and price of the yarns and threads used, second the number of hours for the weaving at so much perhour. To this add perhaps 50% or so for the overhead charges etc. In this way you can arrive at a selling price.

How To Sell Handweaving. Here we have the same business problem as in selling any other article, and the serious craftsman should approach it in that way. Selling to ones friends may be an easy way to begin or it may not. It has always seemed to me to be the best policy not to sell to my intimate friends on account of personal problems which might enter into the transaction. There is beginning in this country now many craft organizations which are offering outlets for weaving. Weavers should identify themselves with this movement and become a part of it. They should subscribe for craft and other magazines which might help to give them new ideas and ways of working, and to learn of needs of the markets they wish to contact. Local exhibits at church or county and state fairs may help to gain a reputation, although they may not be especially profitable from the point of view of sales. The question often comes up as to whether it is advisable to sell outright or on consignment. Of course if you can sell outright, you know your sale is made whether it is to a shop or a person. There are several important points which will be listed below which I hope will be of help.

1. If selling on consignment, know to whom you are consigning your weaving, the type of shop they have, the kind of trade they have, whether your things will be insured against fire and theft or not etc. or in other words know the shop.
2. Find out the kind of weaving they want, and then give them what they want, or else create something they want to sell. Simply because you may think your things are all right does not make them so, if that particular shop does not like them or feels that their customers will not buy them. Keep in personal touch with the shop, know what sells and what does not, yourself, and why, if possible.
3. And always be sure your weaving is styled right as well as perfectly woven and made up. Keep to standard sizes, and to season colors also for success.



Check Drafts, Selvages, and How to arrange Actual Threading Drafts
for the loom.

Three different arrangements of three block patterns are given above. These are pattern effects with the key draft for these just above each one, and all are woven "as drawn" here, although they can be woven in many other ways as well. No.1 draft is on the order of a herringbone draft, just various arrangements of 1,2,3,2 and repeat. No.2 draft jumps from the first to the third pattern block, or the 3rd to the first. And No.3 is planned to have the third block separate two figures which are drawn on the other two pattern blocks alternately. No.3 is perhaps more apt to be of the traditional Colonial type of pattern. Any of these orders may be followed when writing the key draft for a three block pattern, vary the size of the units for different patterns.

Actual threading drafts for these patterns are given on the next page. Figure No.1 (A) is the simplest way to write the threading draft. Two threads are used for each unit of the key draft, and the first three pattern blocks are used namely 1,2, and 3; or 1&2, 2&3, and 3&4. Note how they over lap each other and that odd numbers of threads have been written on the pattern blocks which repeat back on each other. The check draft below is written for the purpose of catching any threading mistakes, and also to see where the single one thread skips will occur when woven. Compare the sizes of the check draft blocks with those on your pattern effect draft, so as to see whether they are correct as to their size. In this draft the 1&4 pattern block has not been written and does not occur at all. Figure No.1 (B) is another way this same pattern draft may be written. Note how the key draft has been changed to show how to indicate that the pattern is to be woven "ON OPPOSITES". Here the pattern skips from the first pattern block to the third, and then to the fourth. Note the difference on the check draft of Figure No.1(A) and that of (B) and see where the single dots come in each draft.

At Figure No. 2 on the next page is the threading draft for No. II. above. This pattern is also written on the first three pattern blocks, 1&2, 2&3, and 3&4. But the 1&4 block had to be added where the pattern skipped from the first to the third pattern block in order to keep the correct tabby alternation, but this 1&4 block is not woven at all.

Figure No.3 (A) is written using pattern blocks 1,3, and 4; or 1&2, 3&4, and 1&4. Note how the draft at (A) has two thread blocks on 1&4 which come in at places where they are not supposed to be. To eliminate these write the draft as at Figure No.3 (B) with an extra thread on the third harness or on the second harness as is necessary. Study the draft at (B) and also note that the 1&4 block has many single dots which gives a third value in the weaving, in contrast to the clear cut blocks where these single skips do not occur as the 1&2 and 3&4 pattern blocks alternate when woven.

Figure No.1 (A) Arrange this for 600 warp threads set 30 to inch.
 Thread selvage 1,2,3,4. - 4
 then C to B -9
 " A to D 11x 52 -572
 " A to C - 11
 left selvage 4,3,2,1. - 4

Total	600
-------	-----

Note that the check draft for Figure No.1 (B) is the same as at (A), except that the single thread skips represented by the single dots are arranged differently. Either threading draft can be used depending on effect.

Figure No.2 Arrange this for 240 warp threads. Divide 240 by 50 threads, one repeat, equals 4x. Then take 4 threads for right selvage and four for end, equals 8 threads, so we have used 208 threads. The first pattern block of the repeat is of 2 threads, and have 32 threads to be used up. $32 - 2 = 30$, and $\frac{1}{2}$ of 30 = 15. So after thread selvage, begin 15 threads from B, or at C. So thread as follows,-

Thread right selvage 1,2,3,4.	-4
Then C to B once	- 15
" A to D 4x 50 threads	- 200
" A to C	- 17
" Left selvage 4,3,2,1	- 4
Total	240

Figure No.3 The draft at (A) is written with 2 threads for each unit of the key draft. The 1&4's with the loops around them come as a result of going from 1 to 4 in places where they are not wanted. To avoid this make the 1&2 and the 3&4 blocks with an odd number of threads as necessary, and the draft corrected is as at (B).

Arrange this for 420 warp threads,-
 Thread right selvage 2,3,4,1 - 4
 Divide 420 by 88 = 4x, then 4x 88 = 352 plus 68 over. First block - 8 threads, less the 2 selvages = 52; $\frac{1}{2}$ of 52 = 26. So begin to thread 26 threads from B or from C to B = 26

A to D = 88 x 4	352
A to C =	34
Threads for both selvages	8
Total	420

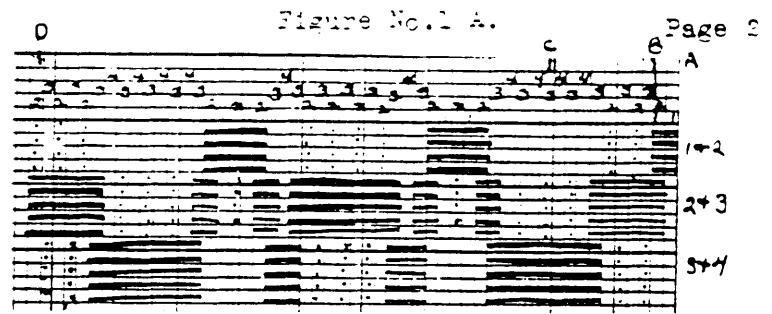


Figure No.1 (B)

Key Draft Arranged for "On opposites"

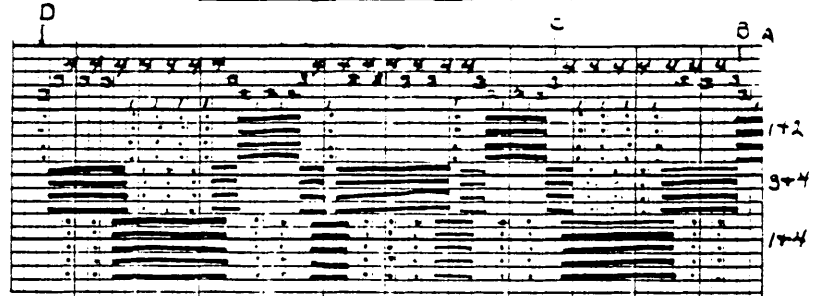
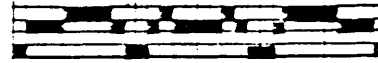


Figure No.2
Key Draft

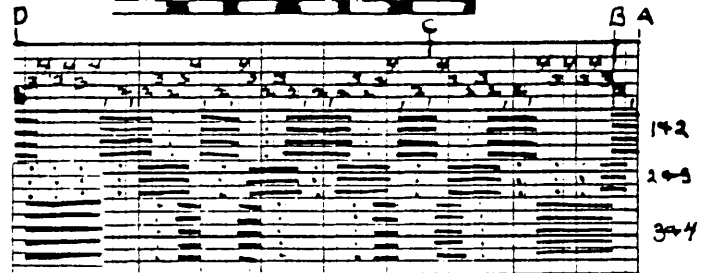


Figure No.3 (A)
Key Draft



($\frac{1}{2}$ of the repeat only)



Figure No.3 (B)



Thus we have several ways of writing key drafts and actual threading drafts for three block patterns. Any combinations of the four harnesses can be used. The pattern blocks may be of any desired size. Two warp threads can be used for each pattern block unit or four if desired. When writing three block patterns with two of these blocks written on opposites, and the third block to separate these, as in Pattern No. III. on Page 1, write the two blocks "on opposites" with an odd number of threads in each pattern block as necessary, so as not to have to write any two thread blocks which would weave the third pattern block where it was not wanted.

Rule for Writing Selvages for Over-shot Drafts. If the actual pattern threading begins with a warp thread on either harness 1 or 3, write the selvege on harness 1, 2, 3, and 4. If it begins on harness 2 or 4, write the selvege threading 2, 3, 4, and 1. Of course this is reversed for the left end selvege.

Rule for arranging Actual Pattern Threading Drafts for the loom.

Let A to B represent the complete threading draft of one repeat. Let A to B be the first pattern block of this threading. Divide the total number of warp threads by AB. This gives the number of times AB will go into the total. From the warp threads left over subtract 3 threads for the first and last selvages, and also subtract AB, the number of threads in the first pattern block. Divide this result by 2. Then let the distance from B, the end of the first pattern block, to C be this number. C is the point where the threading begins. This should not present any difficulty, once it is understood clearly. Another important point is, do not use the key draft to plan the arrangement of the threads to fit the number of required warp threads, as the actual threading draft and the key drafts will vary, due to the fact that some pattern blocks of the actual threading draft may have one thread more or less than the units of the key draft would indicate. This should clear up a number of questions I have had about the matter of selvages and arrangements of loom threadings. Below are two more patterns for three block key drafts.

Figure No.4

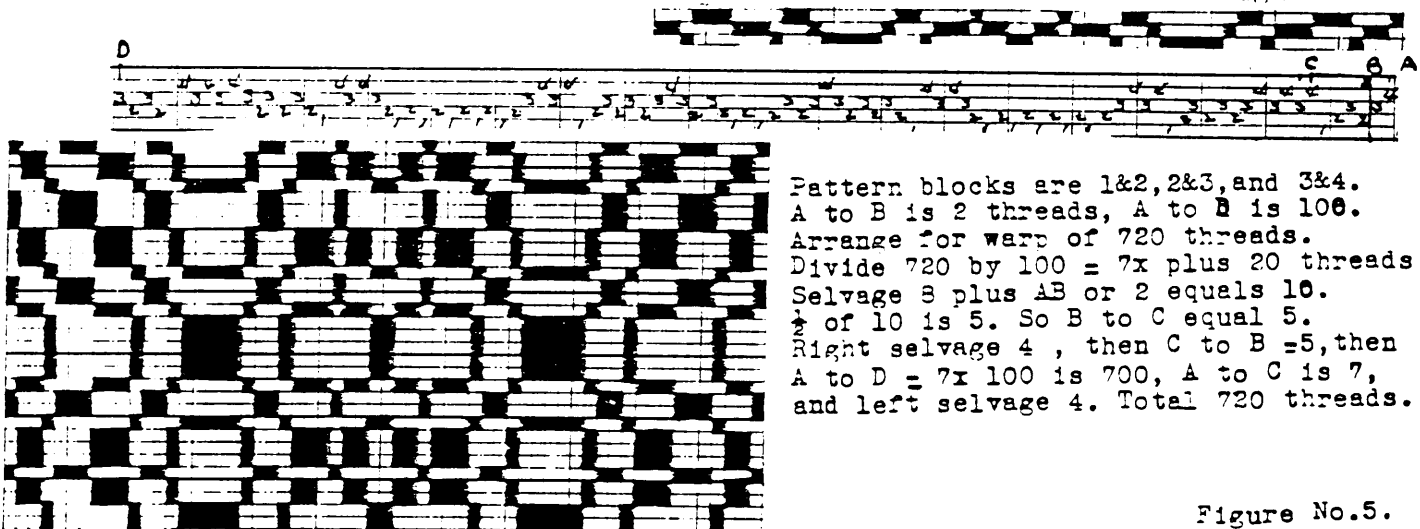
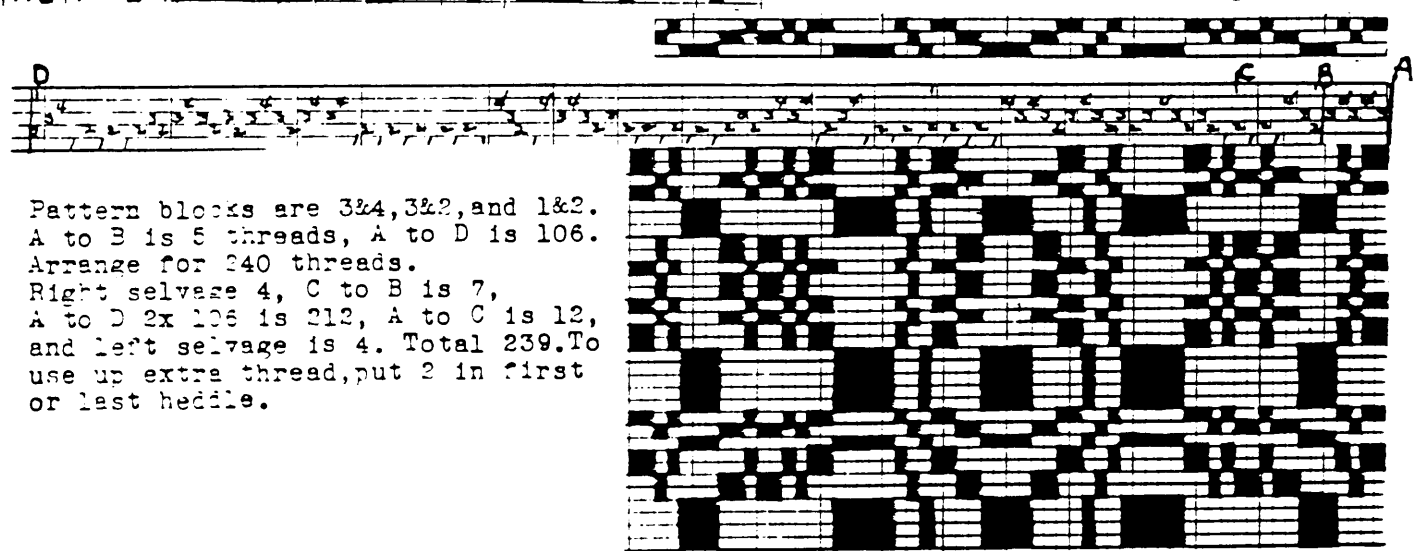
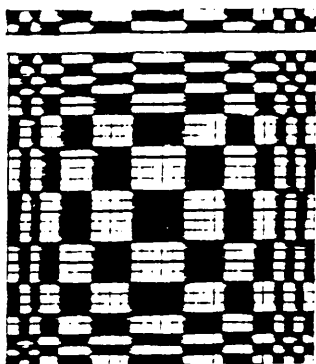


Figure No.5.



Handweaving News



"Summer and Winter" Weave.

This weave is not as generally known and used as it should be. Yet it is not complicated or difficult when its essential structure is understood. As several subscribers have asked for information concerning it, this is being presented here.

First the name "summer and winter" refers to the texture of the weave and not to the pattern. The dark side or "winter" was generally woven with wool weft, and the light side or "summer" was woven with cotton. Old colonial pieces showing this type of texture do not seem to be nearly as common as either the regular 4 harness over-shot weave or double weave, and it is my opinion that this weave was fairly rare even among the early colonists.

Designing for "Summer and Winter" weave offers much freedom. The sizes of the pattern blocks can be large, in fact any desired size, as there are not long over-shot skips of weft. In planning patterns it is best to have contrasts of large and small areas, but in the woven texture there are no sharp contrasts between pattern and the background. Try to have definite centers of interest in each repeat of the pattern, or if desired a pattern may be written to take up the full width of warp. Only two pattern blocks are possible on the four harness loom, but even so, many attractive ways of weaving these can be used. Most of the old pieces I have seen were 4 block patterns woven on 6 harnesses. Six and eight block patterns can be planned for the 8 or 10 harness loom. With these many changes can be made, blocks can be combined or omitted and it is possible to do this by changing the tie-up and treadling.

Structure of the Weave. There are no long over-shot skips in this weave as each weft goes only over three warp threads, and under one warp thread. Any two block key draft can be used for the four harness loom, and each unit of this key draft will require 4 warp threads. To write the actual threading draft for a two block pattern, write one block 3,2,1,2, and the other 3,4,1,4; for each unit of the key draft. This writing is somewhat different from that regularly given for two reasons, first it is more logical, as the regular four harness tie-up of the loom is used, and also because the plain weave tabby is 1&3 and 2&4 as is the regular 4 harness over-shot. And the regular selvaige threading of 1,2,3, and 4 may be used too.

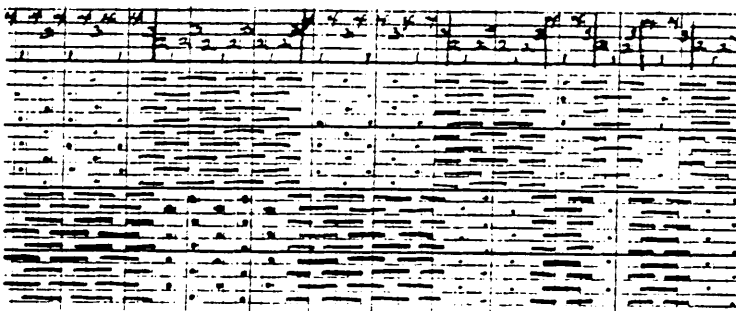
For patterns of more than 4 harnesses, use 3,5,1,5, for the 3rd pattern block, 3,6,1,6, for the 4th pattern block; 3,7,1,7, for the 5th pattern block; 3,8,1,8, for the 6th pattern block; 3,9,1,9, for the 7th pattern block; and 3,10,1,10 for the 8th pattern block. Plain weave thus would be 1&3 and 2,4,5,6,7,8,9,&10. The Strueto looms are very easy to use for these patterns as any combination of harnesses can easily be made by bringing down the required levers. For experimental use the small 3" loom can be made into 8 harnesses, and used effectively for 6 block patterns.

Different Ways of Weaving "Summer and Winter" Weave.

1. "One and one" weave. Write a two block key draft for this weave. It can be arranged as a repeat as the one given below, or if desired it can be planned for the full width of the loom. Multiply the number of units in the key draft by four for the number of threads of warp needed, according to whether it is written as a repeat or for the full width of the loom. Weave a sampler to try out the pattern as well as to become familiar with the different kinds of textures possible in this weave.

Weaving "One and one" consists of putting one shot of weft on 2&3, and one on 1&2. Repeat this alternately for one pattern block until it is squared; then one shot of weft on 3&4 and one on 4&1 until this, the second block is squared. The pattern shown below is just one half of one repeat of the pattern key draft on the top of Page 1. Plain weave tabby is used after each pattern weft shot. The single dots on the draft drawn out below indicate single skips of the pattern weft which show up in the plain background for varied effect. Note the difference in these dots according to the way the pattern is woven. No.1 shows the "one and one" effect. Also note that in the threading draft below one pattern block begins with a two thread block 3&2; while the second pattern block begins with a 2 threadblock on 3&4. Start and end each pattern block with a weft shot on either of these combinations. Remember on the Structo loom, the opposites have to be used or 1&4 levers to weave block 3&2; and the 1&2 levers to weave block 3&4. Put in a shot of plain weave tabby between each pattern weft shot, alternating 1&3 and 2&4 as is usual. This is necessary as Structo harnesses rise instead of sink.

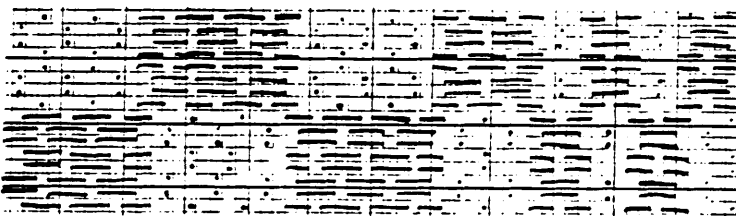
2. "Two and two" or weaving in pairs. At No.2 below is shown the effect of weaving in pairs. For this weave one shot of 2&3, then 2 shots on 1&2; 2 on 2&3; 2 shots on 1&2; and one on 2&3; for one pattern block. For the other pattern block weave one shot of weft on 3&4; 2 shots on 4&1; 2 shots on 3&4; 2 shots on 4&1; and one shot on 3&4. Weave each pattern block down square, and note that the first shot of each pattern block is one shot on one pattern block, followed by two shots on each pattern block, and ending always on one shot the same as at the beginning of the block. Alternate plain weave tabby is used between these pairs. A little diamond effect weave appears depending on which plain weave tabby is used between the pairs. Weave two samples of this to see how this happens about 2 to 4 inches of each. For the first sample, follow the first shot of pattern weft with 1&3 tabby, and put the 2&4 tabby between the pairs.



(1)

2+3
1+2
2+3
1+2

Then after weaving a few inches, try out putting the 2&4 tabby after the first single shot. This will not show any difference in the drawing but it will when woven.

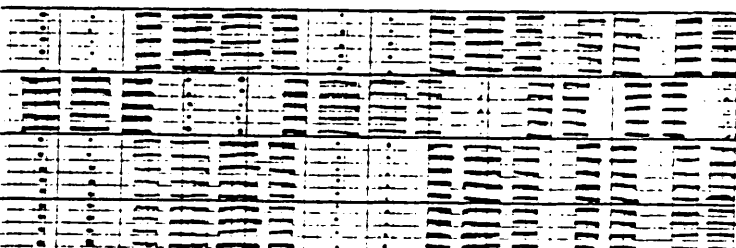


(2)

2+3
1+2
2+3
3+4
4+1
3+4
4+1
3+4

3. Weaving on one pattern shed repeated to square the pattern block. For this repeat 2&3 to square one pattern block as at Figure No.3 at the left. Alternate plain weave tabby after each of the pattern shots. Use 3&4 repeated for the second pattern block in the same way. Or if desired 1&2 might be used for one block, and 4&1 for the other. But keep to one system throughout the weaving.

Recently an interesting old red and white Swedish tablecloth came to me which was woven in this fashion. In this also note where the single one thread skips occur and the different effect of the background from that of the two textures above.



(3)

2+3
3+4
1+2

4. Lengthwise stripes. Any one of the three methods of weaving described on page 2 may be repeated over and over on either one block or the other to make stripes lengthwise of the textile. This is effective for rugs, especially if a solid border is woven of the pattern, and then the stripe repeated for the center of the rug over and over. In planning this sort of thing try to arrange an interesting grouping of the pattern blocks so as to form a good striped center. Linen luncheon sets also may be worked out in the same way.

5. Solid Weft Stripes. Can be woven any desired width by using lever 3 alone, and lever 1 alone alternately. On a treadle loom where the harnesses sink, tie up 1&2&4 for lever 3; and 2&3&4 for lever 1. It is possible to weave these stripes of weft with a tabby or without. Try a few inches with a tabby, and then a few inches without. Then try levers 1&2&4 alternately with 2&3&4 in the same way just to see the difference in the effect.

6. Weaving "On opposites". For this two colors of weft must be used, a dark and a light, or contrasting colors. The warp threads should be set far enough apart so they will be entirely covered, or very fine weft should be used. Plain weave tabby may or may not be used between the shots on opposites. Also the warp should be stretched tighter than for regular weaving. Weave one shot on each pattern shed as follows; - 3&4 dark weft, 2&3 light weft, 4&1 dark weft, 1&2 light weft; repeat as desired to square the pattern block. The order of weaving is always the same. To weave the second pattern block simply change the colors, making the first shot of the next pattern block the same color as the last shot of weft on the preceding block. Many handsome effects can be achieved by using this technique, and a number of colors can be employed as well.

7. "Picking up only part of the pattern" may be carried out very easily. Carry the pattern weft only as far as desired in the open shed, then push it below the warp threads, change and put in the plain weave shot, change to the pattern shed again and bring up the pattern weft from below into the pattern shed at the point where it is desired, lay it for the required distance, change to alternate tabby shed and so on. Any of the different textures described on page 2 can be used for this and some most unusual patterns can be developed. Follow the weaving order for "one and one", weaving "in pairs", or weave on one continuous pattern shed as at No. 3.

8. Using 3 harnesses against one for "embroidery" weaving. Either harness 1 or 3 alone will raise a shed over three warp threads and under one all across the width of the warp threads. This makes it possible to do so called "Dukagang" or Swedish embroidery weave. Follow any cross stitch pattern, and weave enough times to square the three thread blocks. Isolated spot figures can be made by laying in the pattern weft as far as desired, then push the thread below the warp threads, throw a shot of plain weave, open the embroidery weave shed, bring up the pattern weft from below, and then throw an alternate plain weave, and so on. A Russian form of embroidery weaving can be done by using first harness 1, tabby, then 3, tabby and so on. This is a somewhat different form of embroidery weaving, but interesting to do.

9. Over-shot pattern. An overshot pattern may be woven by using harness 2 alone with alternate tabby between each pattern weft shot for one pattern block, or 4 alone with alternate tabby between for the second pattern block. In planning drafts where the overshot is to be used, do not plan the key draft pattern blocks too long or the overshot skips will be too long to be practical. A pattern of small blocks is best for this.

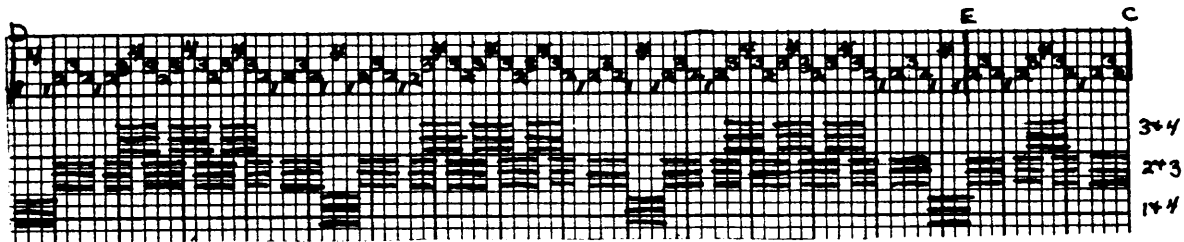
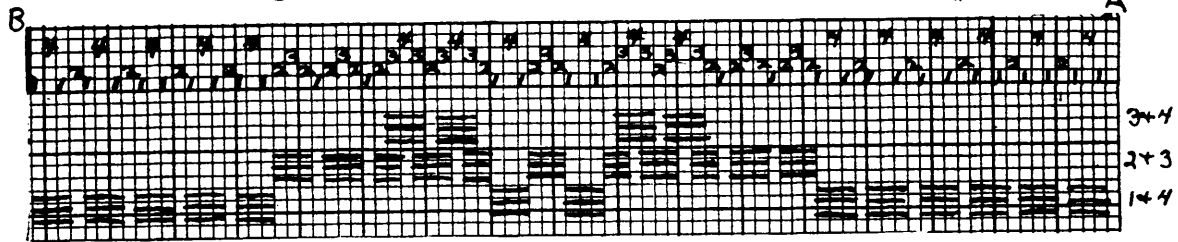
10. Modern effect by combining blocks. For this any two block summer and winter pattern can be used. Draw out the design to be followed and pin under the warp threads. Bring down levers 3&4 to open the pattern shed, carry the pattern weft as far as desired in this shed and bring it out on top of warp threads. With 3&4 still down, also bring down lever 2 which brings background on top. Put the pattern weft shuttle back down into this pattern shed carry as far as desired, bring to the top again, let lever 2 up, put pattern weft back down into the 3&4 shed again, carry as far as desired until the width of the warp has been used. Then put in plain weave tabby. Repeat as desired. For the other pattern shed use 1&2 down, carry pattern weft as far as desired, then bring down lever 4. Repeat for the width of the warp as necessary. Then put in the plain weave shots as usual. This has many possibilities for unusual pattern designs.

Handweaving News

Key draft for Luncheon Set arranged by
Mrs. Lillian Cowley.



Pattern Threading "Crackle" Weave with Border AB added to #219.



Some More "Crackle" Weave Patterns.

The patterns designed in this month's News are some we evolved from the inspiration of the ancient Schleelein book at the Pennsylvania Museum. One half of one repeat is given at Figure No.1 below of #219 of that book. These patterns were without doubt planned for many more harnesses, but it is possible to use three blocks out of a possible four to weave these on a four harness loom by using the "crackle" weave or "Jamtslandvav" technique of threading drafts. No border is given with the original design, but several different arrangements are given here to show how borders can be added to any desired pattern.

The check draft is drawn out for the pattern threading given above so one can get the woven effect. The tieup is as for a regular four harness loom, 1&2, 2&3, 3&4, and 4&1, with plain weave 1&3, and 2&4. The numbers written at the right on the check draft indicate the harnesses as the pattern is drawn down, and as they would be for weaving on a loom where the harnesses sink when the treadle is pushed down.

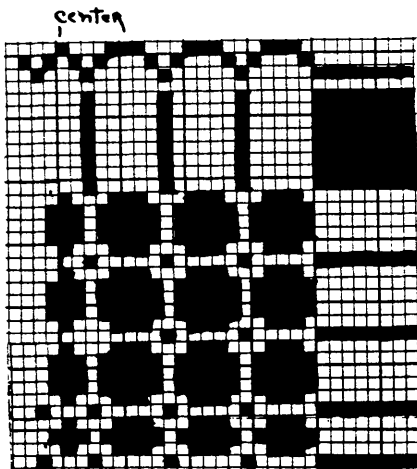


Figure No.1

For a loom like the Structo where the harnesses rise when the levers are brought down, transpose the treadling to read levers 1&2 for 3&4; 1&4 for 2&3; and 2&3 for 1&4. No.20 mercerized cotton or 40/? linen can be used for a warp of 540 threads, set at 30 threads to the inch. Weft can be natural raw silk with linen tabby or a heavy white rayon with tabby in linen color.

Thread the pattern draft into the loom as follows,-
Thread first two heddles on right edge double - 2 threads
Border A to B - 85 "
C to D 4 times 88 - 352 "
E to C once - 13 "
End Border B to A " - 85 "
Last three heddles on left double - 3 "
Total 540 "

9 spools of Structo ready wound warp may be used if desired for this.

Count for heddles,- Harness 1- 126, harness 2-177, harness 3- 144, and harness 4- 93. Total 540.

Treadling directions for Pattern on Page 1. As no drawing is given of this draft the directions for the weaving are given. Raw silk was used for the weft and is about the same weight as a shetland yarn. Three single strands of No.20 mercerized cotton,pale blue,pale green,and pale orange were used together for the plain weave after each pattern weft. For end border A,weave 23-12 X,always repeat this block to weave a square if using other weft yarns.Finer weft would have to be woven more times to make the block square,and also the rest of the directions in proportion. To continue,- 12-4x,14-4x,23-2x,12-2x,center of border,repeat back to beginning in same order. Then for the center, B 12-4x,14-2x,12-4x. For C, 23-2x,12-4x,14-8x, 12-4x,repeat all of C three times. Then repeat B and then C for the center as many times as desired,end with B and then repeat A for the border of the other end. This can be used for a runner,for a pillow, or for a table square if desired.

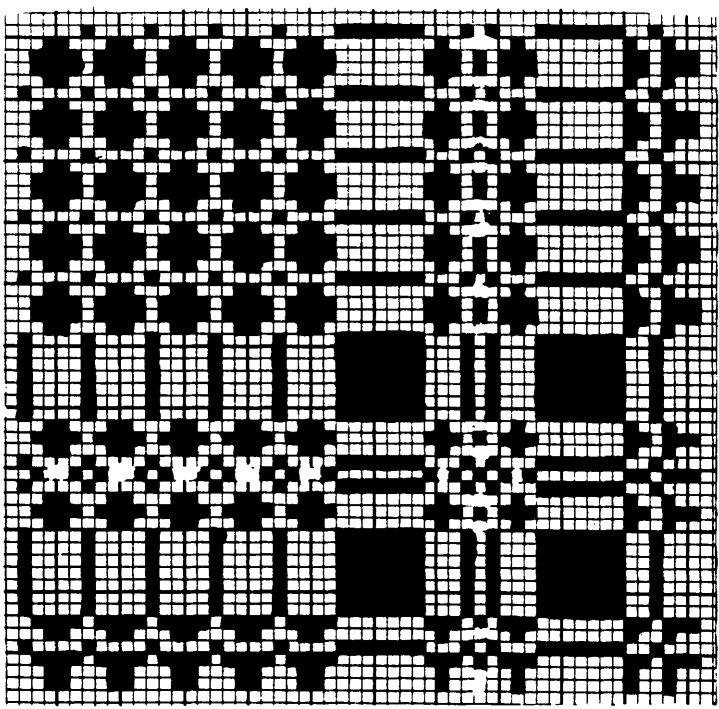
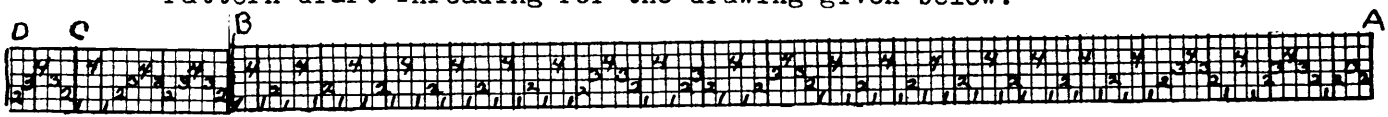
At Figure No.2 below is given another arrangement of a border and similar type of pattern planned and woven by Mrs.Helen Hill.Both the corner and the center give a different effect from that of the pattern above, a diamond figure comes up as when weaving a summer and winter pattern. This is planned for a warp of 420 threads for a luncheon set,and can be of No.20 mercerized cotton or of 40/2 linen with weft of white linen weaver for the pattern and pink 40/2 for the plain weave tabby. Or a natural fine knitting cotton with pink No.20 mercerized cotton for tabby may be used. Warp is set at 30 threads to the inch and threaded into the loom as follows,-

Thread first two heddles double - 2 threads
 Then from A to B once - 90 "
 " " B to C 29 x 8 - 232 "
 " " C to D - 5 "
 " " B To A - 90 "
 Thread last heddle double 1

Tieup is the same as for regular four harness loom 1&2,2&3,3&4,and 4&1,with 1&3 and 2&4 for plain weave. Transpose for the Structo loom as usual.

Total 420 threads

Pattern draft Threading for the drawing given below.



Weaving directions,-

For A, the edge border.

- 12-4x,
- 14-2x,
- 23-2x,
- 12-2x,
- 14-2x,

Then for B, the corner square.

- 23-20x
- 12-2x,
- 14-2x,
- 12-2x,
- 23-2x,

14-2x,center of this border,repeat back to beginning of B,in same order.

For the Center C.

- 12-2x,
- 14-2x,
- 12-2x,
- 23-2x,

repeat for a much as desired, alternate a plain weave shot after every shot of the pattern weft.

Figure No.2

The design shown at Figure No.3 is another arrangement of the same sort with a different border. This is planned for a small table cover or a wide runner. The idea for this came from a 15 harness damask pattern in "Hemmetts Vavbok" by Elisabeth Waern-Bugge. The same kinds of material can be used for this as described for the first two designs. Linen tabby with white rayon weft is an excellent combination. Make a warp of 720 threads of No.20 mercerized cotton or 40/2 linen natural.

To thread the pattern threading, - Thread a right selvage 1,2,3,4, - 4 threads

Count for heddles.

Harness #1	-246
" #2	-188
" #3	-114
" #4	-172
Total	720

Then from A to B 3x 18 - 54 "
 B to C once - 89 "
 C to D 3x 18 - 54 "
 D to E 11x 28 - 308 "
 E to F once - 18 "
 D to C 3x - 54 "
 C to B once - 89 "
 B to A 3x - 54 "
 Left selvage thread 4,3,2,- 3 "

Figure 3. Threading Draft.

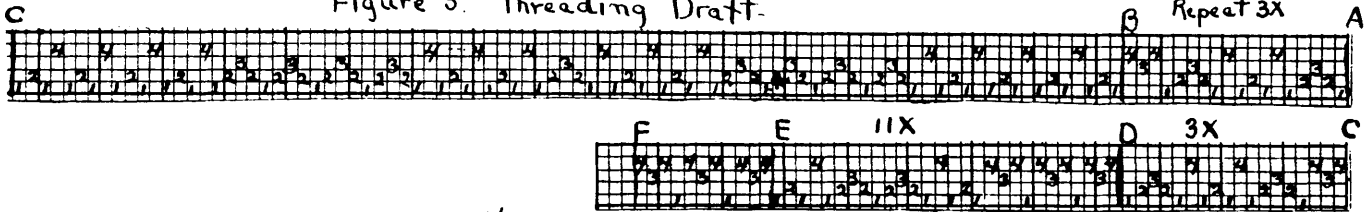
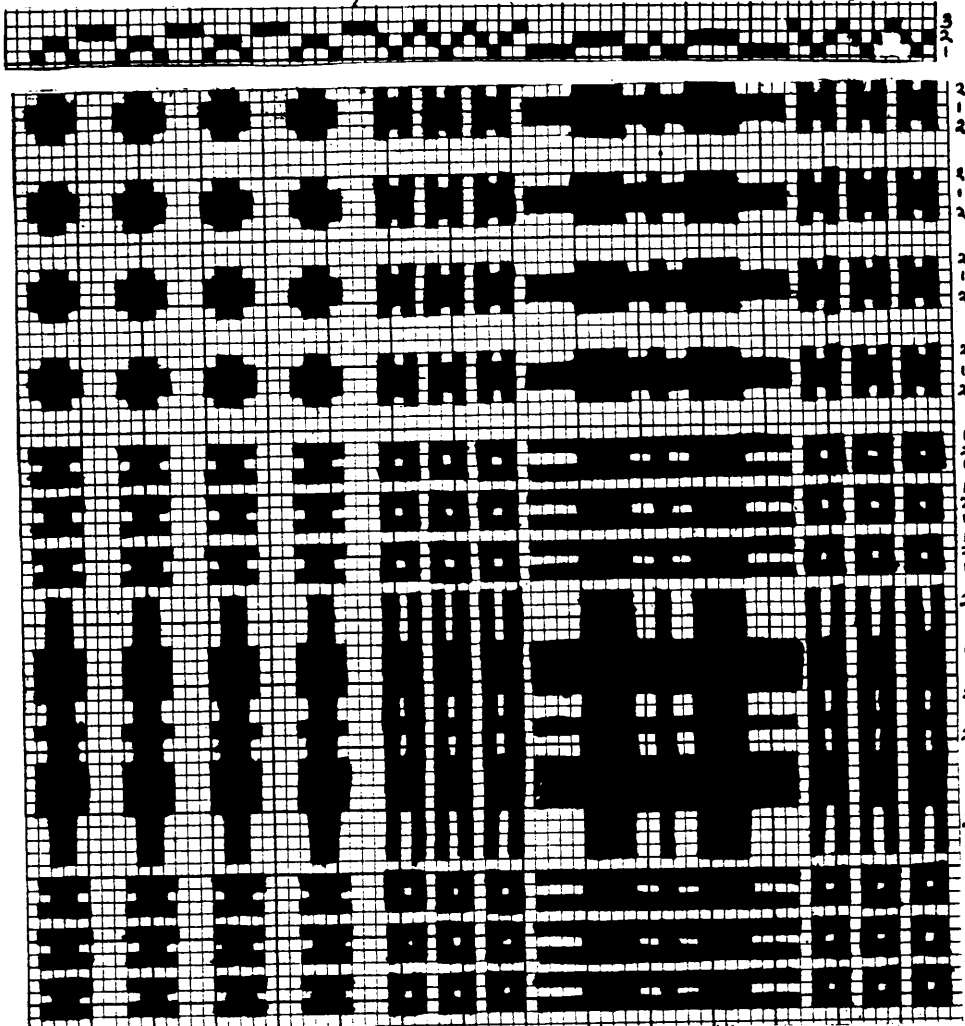
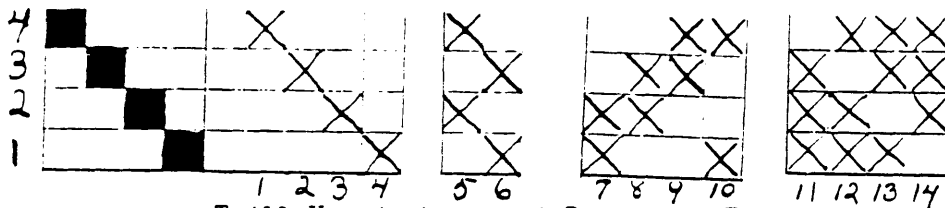


Figure 3. Key Draft.



Tieup - The regular four harness loom tie-up is used, but only two of the pattern blocks are woven, namely block 2 and block 1. Note how these are alternated to get the effect of the pattern. The spaces between should be woven in plain weave to keep the effect of the separate pattern design. But of course there is no reason why the third block could not be woven but the effect would be different. Note also how the key draft at the top of the pattern design is written. It is easier in general to follow the effect of the drawing than to use a set of treading directions for these patterns due to the fact that different yarns require different number of shots, and also people beat differently too.

Figures at side of drawing indicate 1st and 2nd pattern blocks. To weave use 2 & 3 for block 2, and 1&2 for block 1. For this with Structo loom levers use, 1&4 for block 2, and 3&4 for block 1.



Twill, Herringbone, and Rose-path Threadings.

These threadings form the basis of much weaving and their use and variations are many. To the beginner perhaps it may not seem as though they could be so useful and interesting, because they are simple and easy to thread into the loom.

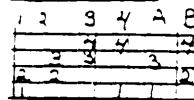
Uses for twill, herringbone and rose-path. These threadings are the next step beyond the two harness weaving, and of course can be used in many of the same ways as two harness variations. And they can be used for practically all kinds of woven materials, as tweeds, linens, upholstery fabrics, draperies and curtain materials, rugs etc. They are being much used for modern effects where pattern has become of less importance than texture interest. "Vavbok" by Eva Ödlund and other of the Scandinavian books on weaving devote much space to these threadings. E.A. Poseltdt "Dictionary of Weaves" is another book which is entirely made up of many different arrangements of twills.

Twill and its Complete Tie-up. At Figure No.1 given above is one repeat of the twill threading represented by black squares. Beginning at the bottom square, one thread on harness 1, one on harness 2, one on harness 3, and one on harness 4. This is then repeated across the width of the loom for number of warp threads required. The X's represent how the 4 harnesses are tied to the treadles, and the numbers below these X's the treadle number. Thus the complete tie-up for twill would require 14 treadles if all were to be tied up at one time on the loom. Beginning with the figure 1 or treadle 1 of the complete tie-up, the X means that the 4th harness is tied to the first treadle, continuing with 2 the second treadle is tied to the 3rd harness, 3 or the third treadle is tied to the second harness, and 4 or the 4th treadle is tied to the first harness. On most looms the harnesses are tied one to each lamm, and then the lamm is tied to the treadles as indicated on the tieup draft. Treadles 5 and 6 are the tieup for plain weave, often called binder or tabby. The location of these treadles is a matter of choice with the weaver. Some persons like to have them both together and the last two treadles on the right hand side, others tie them in the center between the pattern treadles, while others tie them one at the extreme left and the other at the extreme right. It makes no particular difference where they are located, they are for the plain weave and always tied to bring down harnesses 2 and 4, and their opposites harnesses 1 and 3, in this standard twill threading draft. The woven effect of weaving with only one harness is shown at A of Figure No.2 on Page 2, the effect of weaving the plain weave treadles is shown at B of Figure No.2. If your loom has only four treadles, you have to weave with two feet in order to bring down more than one harness at a time. At C of Figure No.2 is shown the "two and two" twill effect, or in other words each weft goes over and then under two warp threads consecutively as the pattern treadles are brought down in order. The drawing shows how the pattern effect can be worked out. Of course these pattern treadles can be brought down to weave in any desired order, and the plain weave treadles should alternate after each pattern weft shot if the same treadles is used for several pattern weft shots. This is the principle of all so called "over-shot" weaving.

Treadles 7, 8, 9, and 10 of Figure No. 1 Page 1, are the so called "standard" tieup for a loom with 6 treadles. The same thing written with figures instead of K's is shown at Figure No. 2. The woven effect is given at C. Figures at the side of the drawing represent the harnesses brought down.

Treadles 11, 12, 13, and 14 of Figure No. 1 give just the opposite woven effect from A. They are the combinations which weave a "three and one" twill. In weaving any of these 14 tieup combinations may be used to produce different effects. Drawing down woven effects on paper It is often desirable to draw out possible plans for weaving on paper first. Shots of weft may be drawn by solid black squares or by a single line across on cross section paper. Single dots represent a skip over one thread. Thus at A of Figure No. 2 the weft goes over 1 and under 3 warp threads; at B it goes over 1 and under 1, on one row and on the next row over and under the opposite warp threads. This gives plain weave, often called tabby or binder. At C, by using the "standard" tieup we have a two and two twill, at D just the opposite of A, or over 3 and under 1 warp thread. While at E, we have a combination of the following harnesses 123, 23, 341, and 41.

Tie-up "Standard"



Tie-up "Double Width" Cloth

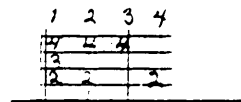
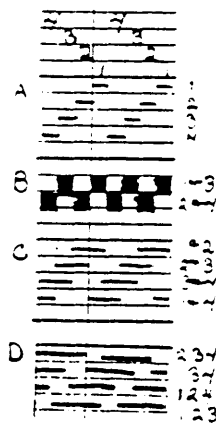


Figure No. 2 Twill threading

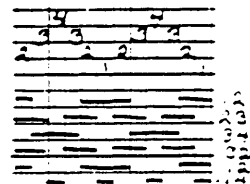


Double Width Material. It is often desirable to weave double width material on a four harness loom, and this can be done on the regular twill threading. Start to thread with the first thread on harness 2, then 3, 4, and 1, 2, 3 and 4 for the width of the warp. Sley the warp twice as close as desired for the finished material, as one half of the warp is on top of the fabric and the other half is underneath. Use treadles as given on the tieup in regular order, one shot on each change. Repeat for length desired. On Structo loom, use the levers according to the spaces on the tieup draft. The closed side of the weaving comes on the right hand side of the material. Herringbone or Reverse Twill. Two repeats of this are shown at Figure No. 3.

One woven repeat is drawn down using the standard tieup as at Figure No. 2 above.

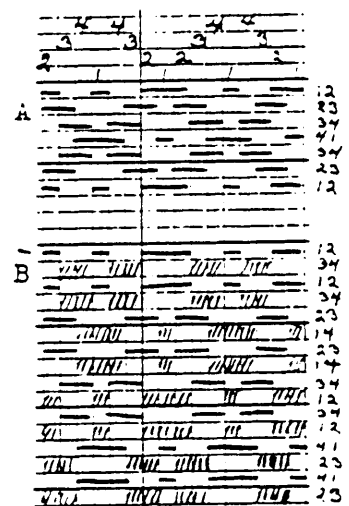
But any order of weaving can be used. If one treadle is repeated more than once, alternate shots of plain weave should be put in after each pattern shot to hold the fabric together.

Figure No. 3 Herringbone Twill



Rosepath or "Rosengang" threading. It is easy to see how this simple threading evolved by the addition of just one more thread added on the first harness to the reverse twill threading. This simple draft has many uses. Many variations of it are seen in the Scandinavian books, and I am told, there, it is considered peasant weaving. At A of Figure No. 4 is the simple standard tieup used, and at B the harnesses used "on opposites". For this two colors are used as indicated on the drawing. Many unusual interesting woven effects can be gained by weaving in this fashion, there is no plain weave used between the pattern shots. Many simple borders can be woven on this threading.

Figure No. 4 Rosepath



Combinations of Twill, Herringbone and Rosepath. It is possible to create many different threading drafts by combining these three simple drafts in any way desired. This method was described in Handweaving News for June 1936 and 1937 if anyone wishes this. Different Methods of Writing Drafts and Tieups.

Figure No. 5

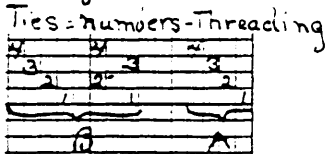


Figure No. 7

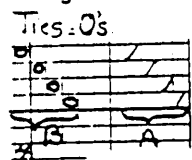
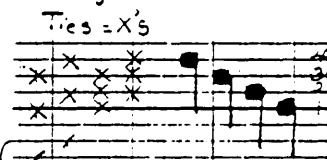


Figure No. 8



Order of reading
Numbers = Treadles
4 3 2 1 -

Figure No. 6

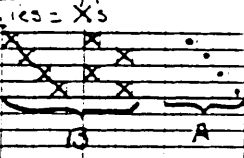


Figure No.5 on Page 2 represents both the threading and the tieup to the treadles by means of numbers. This is a convenient way to write drafts, especially when one has no cross section paper on hand, and there is never any confusion as to which of the harnesses is to be used either when figures are used. In this figure No.5, A is the threading draft, and B is the tieup.

Figure No.6 is exactly the same thing. Here the ●'s are the threading and the X's the tieup to the treadles. When using either of these drafts for the Structo loom, or in fact for any loom where the harnesses rise instead of sink, use the spaces of the tieup draft instead of the X's, or in the case of Figure No.5 the figures.

Figure No.7 represents the threading draft with the 1's and the tieup with 0's. Below the 0's, the figures indicate the order of using the tieup 0's.

Figure No.8 has black notes for the threading draft and X's for the tieup. The numbers at the bottom indicate the treadles. And the I's on these lines the order in which the treadles are used. Here the order would be treadles 3,4,2,1 etc. Reading the X's of the tieup would tie harness 2,3,4 to treadle 1; 1,2,3 to treadle 2, 2 & 4 to treadle 3 for plain weave, and 1&3 to treadle 4 for the opposite plain weave. Sometimes one sees white notes on a threading draft combined with black, usually this indicates a thread of a different color. From these it is hoped that the student will have no difficulty in reading the Scandinavian books, although the language may not be clear.

References for Further Notes on Twills, Herringbone and Rosepath threadings,

Much technical material designed especially for power looms to be found in Textile Design, Pure and Applied by Thomas Woodhouse and Thomas Milne.
 Haandbok I Vaevning by Caroline Halvorsen, one of the best of the Scandinavian books.
 Foot Power Loom Weaving by Edward Worst.
 Ny Vavbok Vol I and II, by Gerda Bjork, Elin Johansson.
 Vara Hemvavnader By Maria Collin
 Vavbok by Hulda Peters
 Praktisk Vavbok By Ottilia Svensson
 Emmets Vavbok Elisabeth Waern-Bugge
 Jamtlands-Harjedalsvavar by Alexander Berger.
 Vavbok Vol I and II by Sigrid Palmgrens. Many of the illustrations in this are in color.
 Vavboken by Montell-Glantzberg. This book also has many colored illustrations.
 How to Weave Linens by Edward Worst

It is hoped this list of books may prove helpful for further study.

There are many variations of twills etc. which are possible and which cannot be given in so short a space, but some of the broken twills and some other arrangements of twill threadings are given below. The dots on these diagrams indicate where just one weft thread comes, and the lines the length of the weft thread skip. The numbers at the right of the drafts indicate the harnesses required to weave as shown. These broken twills can be effectively used for tweeds or dress materials, and some of them are excellent for curtain and drapery material if the warp is spaced far apart and in some cases empty dents are left in the reed.

Figure No.9

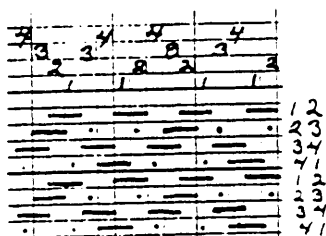


Figure No.10

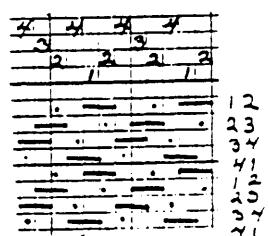


Figure No.11

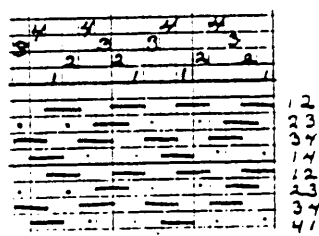
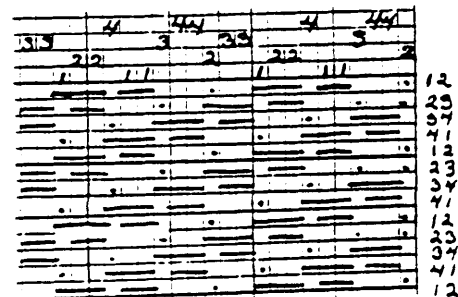


Figure No.12



HANDWEAVING NEWS

R - rollers
C - cords
F - Harness Frames
H - Heddles
L - Lamms
T - treadles

Choice of a Loom.

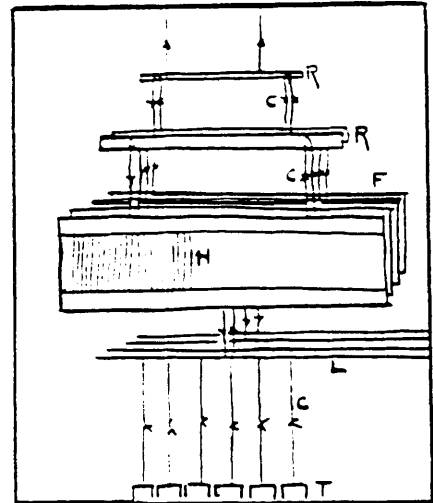


Diagram of Loom Tie-up

The choice of a loom is an important question. It represents a fair amount of expenditure and is a more or less permanent investment. There are many excellent looms being built, but which of these to select is often a difficult problem. It is hoped that some of the suggestions given here will be of some help.

1. Consideration of the person who is to use the loom. This is the first thing to be considered. Is the weaver small, large, in full physical health or handicapped in some way, and how old are they?

2. For what kind of weaving is the loom to be used? Is it going to be used for the weaving of all kinds of textiles, fine and heavy, as rugs and linens as well? There are looms which will weave both kinds of fabrics, but a loom to weave heavy rugs should be heavy and firm to stand much hard beating, while a lighter loom would be entirely suited for linens, bags, coverlets, etc.

3. Looms for school use. In the elementary schools, small looms which children can handle easily are most advisable for several reasons. No small child should work a large heavy rug loom on account of their size. And secondly the cost of the yarns to operate a rug is generally much more than the average school child can afford, and if furnished by the school these weaving supplies are expensive. A large floor loom in the average public school room takes up too much storage space and at best will keep not more than two children, out of a class of 40 or more, busy at once. Small 12" heddle looms tied into plain wood frames are inexpensive and easy for children to use, and can be stored into a small space. The total cost of these is only \$3.75 each. The small 4 harness Structo No. 240 loom is also very satisfactory for school use, and the cost of this is only \$10.00. For college work both of these small looms are excellent for experimental samples, the learning of different techniques, and to enable students to become familiar with what happens with different kinds of yarns and threads when woven. And they may be easily carried back and forth to school if desired. The 20" Jenness two harness loom at \$15.00 is also an excellent loom for school use too. In any kind of school work where there is room for several looms, it seems to me that it is an advantage to have as many different kinds of looms available for student use as is possible, so they can become familiar with them, and know the good points about each in comparison to their cost, and what they will do.

4. Other points to think about are the cost of the loom, how much space will it require? Is it to be used in a small apartment, a large studio, or a hobby room? Would it be an advantage to have a folding floor loom which could be easily carried in the ordinary space in an automobile? In other words the kind of a loom you buy should fit your needs.

5. Buy your loom from a well established responsible firm. It is easy to determine whether a company is a reputable firm or not. Occasionally something on the loom may need to be replaced, although on a good loom this does not happen often. But if it does happen, make sure that the loom is standard enough so it can be replaced. I know of one company who makes looms and it is almost impossible to get any parts for looms made three or four years ago, they make a new experimental loom each year, instead of manufacturing a standard loom they can stick to. A short time ago several subscribers sent me a clipping from a newspaper containing the statement that there was only one man in the country who makes satisfactory looms, that these were all made by hand, and that he was slow on delivery because he could only make 100 looms a year. I was asked if this were true. Now I do happen to know that this particular man does make an excellent loom, and it is true that he makes them by hand. But simply making them by hand makes them no better than a machine made loom from a mechanical, useful, point of view. We are living in a machine tool age and it is silly to say that a hand loom cannot be built satisfactorily with machine tools. The loom is built to do handweaving, and a machine made loom, provided it is built properly, is exactly as good as a hand made loom as far as the finished weaving is concerned.

6. Mechanically a loom should be strong, well built of seasoned wood which will not warp or crack under hard use. It should be good to look at - good in design- and not too fussy. And to be strong, it is not necessary to use a whole lumber yard to build it, some looms have enough wood in them to build two looms, and are difficult to transport or even move at all. Easy action of the harnesses, leams, treadles, etc is very necessary. These should not be too heavy and clumsy, and should be easy to tie up and adjust, and to keep in adjustment. The Scandinavian looms generally use so called "horses" to which the harnesses are tied. These are difficult to keep in adjustment to make a good weaving shed for the shuttle to pass through, rollers or some rigid construction where the harnesses cannot move out of their proper place are more desirable in my own opinion. Often also the question of metal or string heddles through which the threads pass comes up. String heddles are cheaper and perhaps more romantic but much more difficult and slower to thread than metal heddles, I have heard the statement that metal heddles cut warp threads. This does not happen often to my knowledge, and anyway metal heddles are used on our power looms for even the finest fabric, so I am sure that they are more efficient on a hand loom also. Should the loom have a plain or a sectioned warp beam? Some people prefer a plain beam to a sectional one. But here again, it seems to me, that should be determined by the purpose and use of the loom. For long wide warps the sectional beam is much easier and quicker to set up, which is important where time is a factor in the weaving. Ratchets and pawls which control the winding up and letting off on the warp and cloth beam should be of metal. I recently saw a loom built with the ratchet of plywood, this is not satisfactory. On one of my old looms which has been in use for nearly twenty years now and on which I have woven hundreds of yards of all kinds of material, even the cast iron ratchets and pawls are much worn through continued use, wood ones would have had to be replaced long ago. These metal ratchets and pawls are often the parts which present difficulty when one wishes to build their own loom. Loom plans for a 25", 36" and 42" loom may be purchased from Mrs. Edna Burchard, 608 Grand Ave. Oakland, Cal. and are sold only on the condition that all of the hardware, aprons, heddles etc. necessary to build the loom are purchased at the same time. This is an excellent service, for then the builder is assured of a good loom. If interested write for further information concerning this direct, to Mrs. Burchard, though I would appreciate it very much that you mention having seen this information in the News.

Another question which often comes up is "should loom treadles be hung from the front or the back of the loom." My own opinion is that the leverage is better when they are hung from the back of the loom, but the folding Bernat loom has them hung from the front, and they work well indeed. It is easier to find them with ones feet too when hung in the front. Be sure treadles are wide enough for your feet and far enough apart for the width of your feet, but they should not be too heavy as that adds too much weight to the tie-up and harnesses. Should a loom have four or six treadles? I much prefer six myself, as I think it is bothersome to weave with both feet at once. And it always seems as though I can weave much faster when the tabby treadles are tied separately for the plain weave. But this too may be a matter of personal choice. Structo table looms of course have no treadles, and the harnesses are hung in the loom frame so they are always in proper adjustment. This is a great advantage where inexperienced students are using the loom. Weaving results are more sure of a good shed on these looms too, for there is no way they can get out of adjustment. The smaller Structo looms are easy to carry around and to store. A folding floor loom may have some advantages worth considering also, and these should not be overlooked.

7. Second Hand Looms. A word of caution to the novice concerning the purchase of a used loom. Once in awhile it is possible to find these used looms as good as a new one. But very often such a purchase is not an economical one because of the fact that it may be difficult to repair or replace a missing or broken part. Some looms are sold because they are hard to keep in proper adjustment. It is best to consult some one who knows something about looms before buying a used loom.

Different Kinds of Looms. It is not my purpose to advocate any one particular loom in preference to another, but to try to point out some of the distinct advantages of some types as compared to others.

1. Two Harness Looms. The most beautiful textiles in the world have been woven on a two harness loom, as for instance tapestries of all kinds, beautiful textured fabrics, knotted rugs etc. But, and this is important, the simpler the loom the more and greater the need for the weaver to be skilled in his knowledge of the free weaving techniques, and the choice of suitable colors in yarns and threads, in order that he may intelligently use his loom as a tool for the production of unusual handweaving. Technique is very important, for until certain fundamental techniques are acquired one cannot truly create in color on the loom with threads.

A) Picture frame looms, an adaptation of the primitive loom such as the Navajo Indians still use today for the weaving of their blankets. And the same which the ancient Peruvians used for all of their very wonderful textiles. A description of this type of loom and how to set it up has been given in Handweaving News for July 1936, and 1937. This loom is simple but does require patience and skill in order to handle it well. However it is not beyond the average person if he is willing to take time enough to use it, and learn how to overcome some of the mechanical difficulties due to the simplicity of the loom.

B) Simple Heddle Looms composed of holes and slots can now be had for \$3.75 complete with shuttle, leash sticks and frame to tie them into. These also are an adaptation of primitive looms used by many peoples all over the world. These are 12" wide and can be used to learn all of the free weaving techniques, and are useful for adults and simple enough for school children to use also. They are simple, inexpensive, take but little storage space, and can easily be carried back and forth to school if desired. Handweaving News leaflets have contained much information on how to use this type of loom. If anyone is interested in having these there are about 12 leaflets which pertain to this which may be purchased for \$3.50 if desired.

To weave 20" wide, the Heddle Loom made by A.D. Jenness, 22 Roxbury Road, New Britain Conn, is very satisfactory indeed, Cost of this is \$15.00. This is a very sturdy, well built loom with ratchets and rollers, and a loom which one person can warp alone. It is very easy to use and presents no difficulties for a beginner.

C) Two harness floor Looms. There are a number of very satisfactory floor looms available. Many persons using these are entirely unaware that they can weave anything with these looms except rag carpet or plain weave rugs, on carpet warp. But they can weave many other beautiful articles if they would take the time and make the effort to learn about other techniques and other materials. Reed Mfg Co, Springfield, Ohio makes a very good 2 harness floor loom to weave 30" wide for \$30.00. Other firms are making these also, but I have used this one and know it to be entirely satisfactory in every way.

2. Four Harness Looms. Can be had in many kinds, both table and floor looms. It is often advisable to consider space requirements of some of these looms especially when trying to decide what width to buy, and whether to buy a table loom, a folding loom, or just a floor loom. In my own classes I like to have students have the opportunity to use different kinds of looms so they can make their own choice as to what suits their own needs best. For table looms, I have used the Structo for many years and find it very satisfactory indeed. These table looms come in sizes from 8" up to 30" weaving width now, and cost from \$10.00 to \$85.00 for 30" 8 harnesses. The No. 240 Structo can be had in eight harnesses for \$15.00 now also, which increases the range of usefulness of this little loom, one of the best for beginning students that I know of. The question often comes up as to whether to buy a eight or a four harness loom. If you wish to go all of the way in the technique of handweaving, an eight harness or a 10 is advisable, but of course not necessary if you just want to do the free weaving techniques

If you have further questions concerning looms, I should be glad to hear from you.

HANDWEAVING NEWS

Figure No.1 Key Draft - 8 block pattern for 10 harness "Summer and Winter"

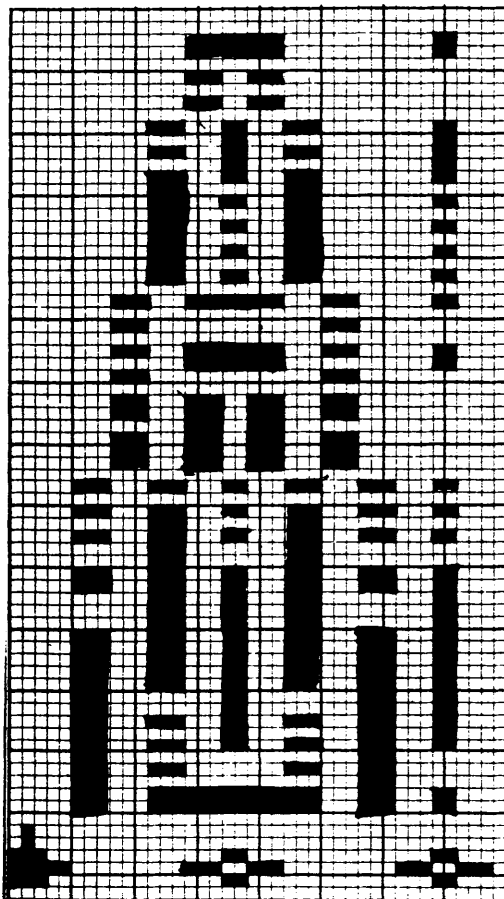
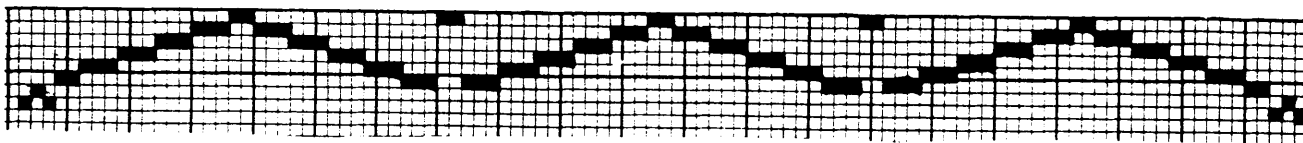


Figure No.2

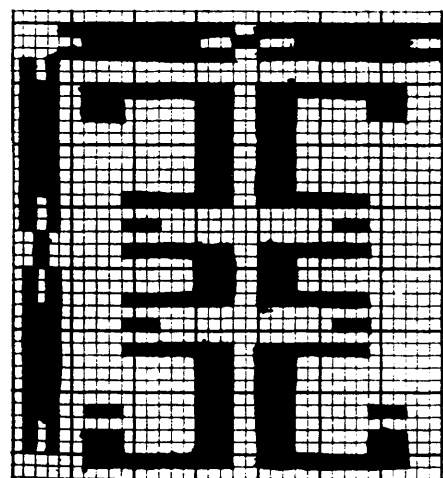


Figure No.3

The pattern designed here was an original one which June Cusick, one of my students planned so as to weave her initials J;C, as shown below at Figure No.3, with a small border all around.

Explanation of Key Draft. Figure No.1 is the complete pattern plan for the full width of the loom, in this case taking a warp of 420 threads. By key draft we mean the plan or key for the pattern blocks. There are eight pattern blocks possible on a 10 harness loom, six on an eight harness loom, and four on a six harness loom for the "Summer and Winter" weave technique.

Units of the Key Draft. Each square of cross section paper on the key draft above represents one unit of the threading draft, and requires 4 warp threads. One unit on a key draft is the smallest size a pattern block can be written, but they can be written as large as is desired. Starting to read at the one unit block on the bottom line of the key draft above, we have a one unit block for the first pattern block, a one unit block for the second pattern block, then a one unit block on the first pattern block again; then a 2 unit block on the 3rd pattern block, 3 unit blocks for the 4th, 5th, 6th, and 7th pattern blocks, and a 2 unit block for the 8th pattern block; and so on.

Threading Draft for each Pattern Block Unit is made up of four threads. Thread pattern block 1-3, 2, 1, 2 for one unit. Block 2 thread, 3, 4, 1, 4. Block 3, thread 3, 5, 1, 5; Block 4, thread 3, 6, 1, 6. Block 5, thread 3, 7, 1, 7; Block 6, thread 3, 8, 1, 8. Block 7, thread 3, 9, 1, 9. Block 10, thread 3, 10, 1, 10. When threading these units are repeated according

to the number of units in each pattern block of the key draft. Note that every other thread is threaded on either the first or the third harness, these are the tie harnesses, they alternate with the threads on the harnesses which control the pattern or the pattern harnesses, namely harness 2, for the 1st pattern block, 4 for the second pattern block, 5 for the 3rd, 6 for the 4th, 7 for the 5th, 8 for the 6th, 9 for the 7th, and the 10th harness for the 8th pattern block. I hope this is clear. If you understand this, it is possible to thread directly from the key draft.

Figure No.4 Threading Draft for Units

10	9	8	7	6	5	4	3	2	1
	9	8	7	6	5	4	3	2	1
		8	7	6	5	4	3	2	1
			7	6	5	4	3	2	1
				6	5	4	3	2	1
					5	4	3	2	1
						4	3	2	1
							3	2	1
								2	1
									1

Designing Pattern Variations on the 8 block Key Draft as given on Page 1.

Figure No.5. Each pattern block repeated once.

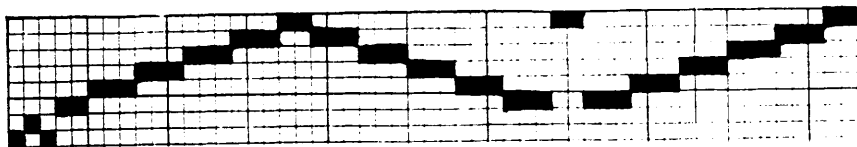


Figure No.6 Each pattern block squared in order.

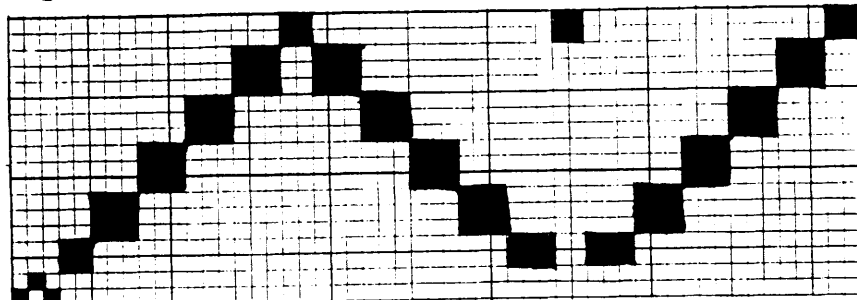


Figure No.7 Pattern blocks repeated to form verticals.

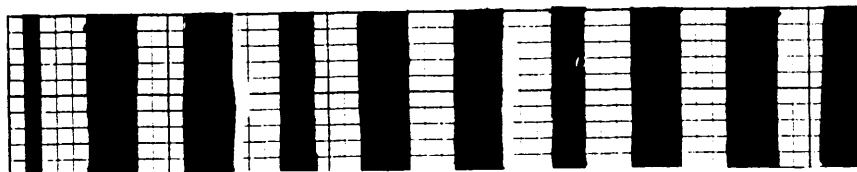


Figure No.8 All pattern blocks combined for Horizontals.

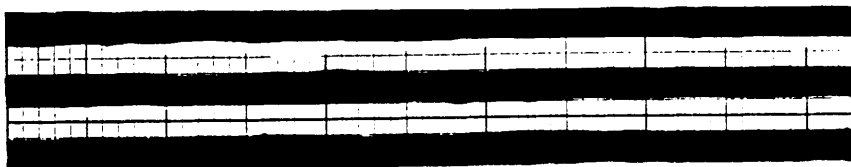


Figure No.9 Alternate pattern blocks for checkboard.

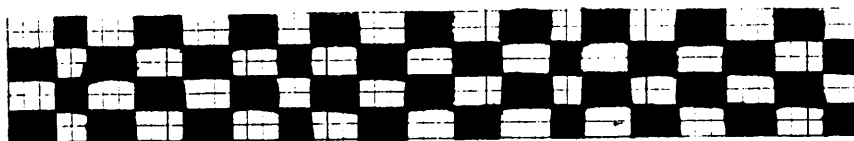
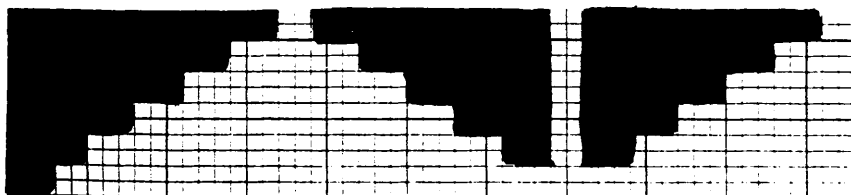


Figure No.10. Horizontals and alternate blocks.



Figure No.11 Combinations of pattern blocks.



At Figure No.5 is one repeat of the Key draft on Page 1. This also would illustrate the actual weaving of one unit of the key draft. Exactly one half of the width of the loom is represented here, and the idea is to show how variations can be planned using any key draft desired. Any of them can be used the same way. It is simplest to draw guide lines down on the cross section paper to indicate the sizes of the different pattern blocks, thus making it easier to draw.

Figure No.6 is made by repeating each of the pattern blocks in turn as they occur on the key draft, and making each pattern block single and square, the same size it is on the key draft

Figure No.7 is made by combining the pattern harnesses so they weave 2, 4, 6, and eight pattern block, repeated enough times for vertical lines. Of course any desired combination of these

Figure No.8 is made by using all of the pattern harnesses for horizontal stripes.

Figure No.9 is alternate checker board squares, taking pattern blocks 3, 5, and 7 making them square, then 1, 2, 4, 6, and 8.

Figure No.10 is just a combination of Figure No.8 and No.9.

Figure No.11 beginning at the top of the drawing combines pattern blocks 1, 2, 3, 4, 5, 6, and 7. Then 1, 2, 3, 4, 5, and 6. Then 1, 2, 3, 4, and 5. Then 1, 2, 3, and 4. Then 1, 2, and 3. Then 1 and 2. Of course these combinations could be drawn down as many times as desired according to the effect.

Figure No. 12 on the next page is the same idea as No.11, and is as follows, - 1, 2, 3, 4, 5, 6, and 7. Then 1, 2, 3, 4, 5, and 8. Then 1, 2, 3, 4, 7, and 8, center, repeat back in the same order to the beginning.

Figure No.12.

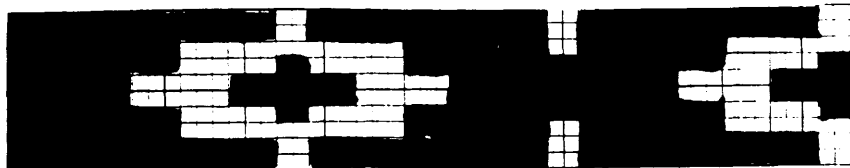


Figure No.13

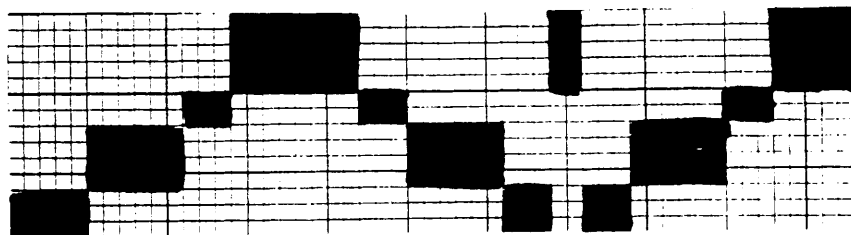


Figure No. 14.

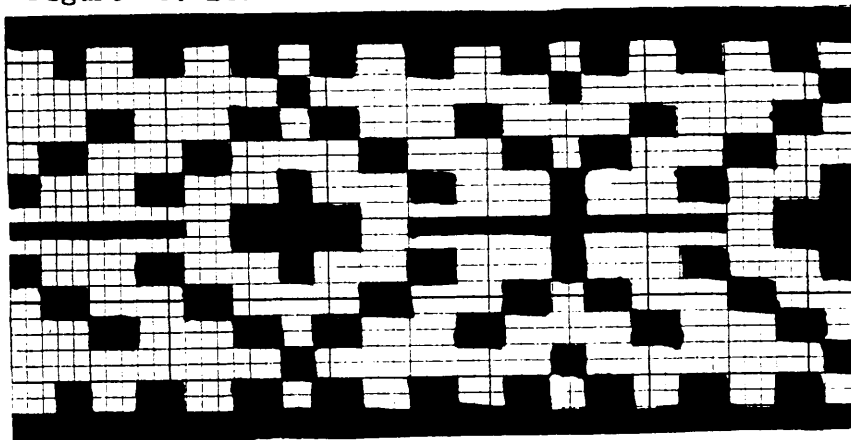


Figure No.15. Use of several colors

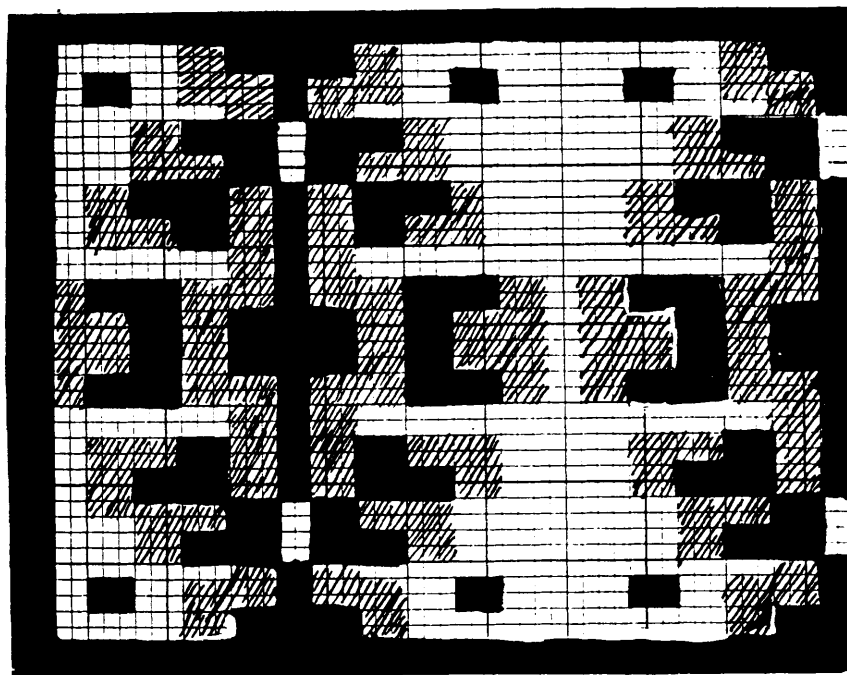


Figure No.13 combines some pattern blocks, leaving others single. And of course these can be woven as large or as small as desired.

Figure No.14 is a design of more or less scattered effect much like many of the old Colonial patterns in this weave, though some of the blocks are combined for the lines.

Figure No.15 has several important features which make it of interest. First it has a border all around. Solid borders can be woven with any pattern by putting a block of the desired size at the beginning and end of a pattern key draft on a separate harness. This is woven by using this harness with the pattern blocks throughout so the border weaves on the side of the pattern.

Use of several colors is also indicated on this drawing. This is not at all difficult to do, but requires close watching to keep the correct order. Open the shed needed for Color A or light green, throw a shot through, then open the shed for Color B or dark green and throw the color through, then open shed for Color C, put color through. Then put in a very fine shot on the A tabby shed and another on the B tabby shed. Then repeat the colors again in the same order. When several colors are used in this way, the back of the textiles have almost an effect of batik, they run into each other.

This News has been concerned with the planning of these "Summer and Winter" eight block patterns, and I hope has opened up a new field for some of you. The weaving of these will be discussed in a future News.

A sampler showing these exact patterns is available for study if desired for cost of \$1.00. Or photographs may be had of it, at 3 for 75¢.



Texture Experiments.

Much emphasis at the present time is being placed in modern textiles on textures. And with the large number of different kinds and sizes of threads, this field can be one of special interest to the handweaver. The material offered in this News is from some experiments carried on by several of my students here at Wayne University, who were interested in seeing what could be done for unusual textures with more or less common threads, and with simple threadings.

Threading drafts. Are very simple, and may be found in Eva Odlund's book Vavbok, one of the Scandinavian books. But the use of these as described below is unusual and interesting and quite different in most cases, due to the variations in sleying the reed, as well as the use of different materials. Each draft will be given and some of the most effective ways we found to use it.

Tie-up Draft

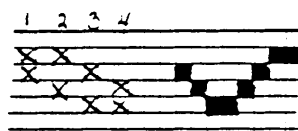


Figure No.1

1. Warp beige carpet warp 18 threads to the inch, one thread in each dent of the reed. Only two treadles used; namely the plain weave harnesses, alternately 1&3 and 2&4, or following the tie-up draft treadles 2 & 3. Weave an inch using just single carpet warp like the warp, then weave 1 1/2" of the carpet warp combined with a heavy hemp thread about the same size, then 3 shots of weft of just single carpet warp, then alternate one shot of carpet warp single and one shot of the hemp single

using two shuttles for this. Vary these combinations as desired. Such a material could be used for drapes or coarse place mats. Color could be added if desired, but this as is makes a good neutral fabric of unusual and interesting texture, though very simple and easy to do.

2. Set up same as No.1, but use very heavy mercerized cotton No.0 entirely for the weft. Fabric is interesting on both sides. Could be used for upholstery. For levers of Structo loom, weave harness 1 alone, 2 alone, 3 alone, 4 alone, and repeat.

3. Set up the same as No.1, but use beige or ecru carpet warp like the warp for the weft and combine this for a double weft with 2 threads of 40/2 ecru linen. Weave levers 1&4, 2&4, 3&4, repeat this 2x; then 1 alone, 2 alone, 3 alone. Repeat over and over from the beginning. Both sides of this are of interest, long warp skips on one side.

4. Set up same as No.1. Use all of ecru carpet warp for the weft, weave as follows, - 1&3, 1&2, 1&3, 2&4, 3&4, 2&4, repeat as desired.

5. Set up and threading same as at No.1. For this use ecru carpet warp combined with natural gray hemp for the weft. Weave levers 1&2,1&3,1&4, repeated 2x, then 2&3. Repeat as desired. All of above experiments were woven by a student Blossom Gam.

6. Now try sleying the same warp 12 threads to the inch, using threading draft at Figure No.1 in the variations which follow below. These are all well beaten up and with the exception of those where the directions say beat lightly, would make a firm close weave suitable for upholstery or heavy drapery materials. All directions for these refer to the levers of the Structo loom. Using a double weft of ecru carpet warp and 40/2 white linen, weave as follows, - 1&4, 2&4, 3&4, 1&3. Repeat as desired.

7. Set up same as No.6. Weft the same material. Weave as follows, - 1&4, 2&4, 3&4, 1&4, 2&4, 3&4, 1&3. Repeat as desired.

8. Set up as at No.6. Weft all single ecru carpet warp. Weave 1&3, 1&2, 1&3, 2&4, 3&4, 2&4. Repeat for length desired.

9. This sample was woven the same as No.2 and with same weft. But the set in the reed at 12 threads to the inch makes this very thick and heavy.

10. Weave with ecru carpet warp weft single, 1&2, 1&3, 1&4, 2&3 repeated as desired.

11. Weave with alternate shots of ecru carpet warp and heavy rayon yarn or Mercerized cotton No.3 or No.5 white, as follows, carpet warp on 2&3, rayon 2&4; continue the alternation on levers 2&3, 3&4, 2&3, 2&4, 2&3, 1&3, 2&3, 1&2, 2&3, 1&3, repeat as desired. This is attractive on either side and very heavy, would make an excellent upholstery.

12. Weave one shot of ecru carpet warp as follows, - 1&3, 2&4, 1&3, beat lightly, then one shot only of white candlewick cotton, repeat as desired. Result should be open and suitable for a heavy curtain.

13. Weft for this is white carpet warp, weave one shot on each shed, 1&3, 3&4, 1&2, 2&4; then with rayon bouclé one shot on 1&2&3, with white warp continue 2&4, 1&2, 3&4, 1&3; then with the rayone bouclé again one shot on 2&3&4. Repeat as desired. Both sides of this are of interest and either side could be used for an upholstery material.

14. All of carpet warp in ecru like the warp, one shot on each shed, beat up hard. 1&2, 1&3, 1&4, 4 alone, 2&4, 3&4, 2&4, 1&4, 1 alone, 1 & 3, repeat as desired.

15. Weft for this same as No.14. Weave 1&4, 2&4, repeat 6x, then 1&4, 1&3, repeat 6x. Repeat as desired. This should be beaten up hard and close to make a firm fabric. All of above samples from No.6 to No.15 were woven by Mrs. Helen Hill.

16. The following samples were woven on same threading draft as at Figure No.1 but sleyed at 9 threads to the inch. These also were woven by Blossom Gam. Combine one thread of hemp, 40/2 natural linen, and 6 strand cotton pale yellow beige color and weave lever 1 alone, 2, 3, and 4, repeated as desired. This gives a very grassy and unusual texture.

17. For weft with this, use four threads of the following together, one shot on each shed, 1&3, 1&2, 1&3, 2&4, 3&4, 2&4. - ecru carpet warp, gray hemp, heavy mercerized cotton No.0, and gold raw silk. This would make a heavy drapery material. Do not beat too hard.

18. Weave in same order as No.17 but use 3 threads of weft together instead of four as in No.17. The wefts used were white rug chenille, cream mercerized cotton No.0, and the natural gray hemp. If the very heavy mercerized cotton cannot be purchased, it is possible to use 2 strands of No.3.

Many other variations are possible on this threading. Here we have kept to rather neutral color schemes, and some of the textiles have a very grassy texture, and all of them a modern different feeling than much that is generally seen. If you wished to try these, thread your loom up and use the different sets in the reed as is suggested here. Also try out different materials which you may have on hand. Much more can be done with these.

Tie-up Threading

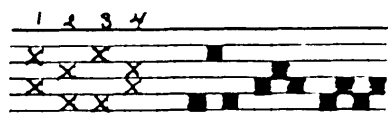


Figure No.2

The threading at Figure No.2 is another one from Eva Odlund's "Vavbok", and this can be used with much variety also through the use of different kinds of threads and sleying reeds of different sizes. In each case though, sley the first four threads of the reed in one dent, skip a dent, sley the next 3 threads in one dent, skip a dent, sley the next 3 threads in one dent, skip a dent, and then repeat. The 2,1,2,1 will weave plain weave, and this may be increased in size if desired.

1. Use a 15 dent reed, sley as directed above. For the 2,1,2,1, use 16/4 linen for warp, and for the 2,3,2, and 1,4,1, use heavy No.1 mercerized cotton white. Do not beat hard. Treadle 1&3;2&4 with mercerized like the warp, then 1&4 with gray linen like warp; 2&4 mer.cotton and 1&3; then 2&3 with linen. This weaving can be varied in many ways with this same material. This fabric would make an excellent simple heavy drapery, and weave up very quickly and easily.

2. Plain carpet warp used for warp and also for weft with the same dent reed, also is very effective and useful.

3. Use carpet warp and sley as directed in either a 9 or a 10 dent reed. Use heavy white rayon or No.1 mercerized cotton for weft, and weave as follows, - 1&3, 2&4, 1&4, and 2&3; repeat this throughout.

4. On the same set-up as No.3 use 1 thread of heavy hemp thread on one shuttle and on another shuttle carpet warp. Weave 1&3 with hemp, 2&4 carpet warp, 1&4 with warp, 2&4 with hemp, 1&3 with carpet warp, and 2&3 with warp. Repeat this as desired. This makes a loose grassy type of fabric also. In this the hemp thread was approximately the same size as the carpet warp.

Tie-up Threading

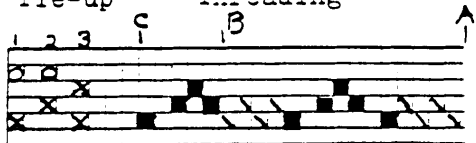


Figure No.3

The threading at Figure No.3 is another similar type. But it is only a 3 harness threading. When setting this on a treadle loom leave the 4th harness on, but of course it is not threaded, and the weaving will go easier if the harnesses are left tied also as indicated by the 0's on the tie-up draft. However of course on the Structo looms no trouble would be had with the 4th harness. The 1,2,1,2 's on the threading draft will

weave plain weave, and this block can also be made as large as desired to weave plain weave stripes. These threads can also be of a different color than the rest of the warp if desired. Carpet warp with a 15 dent reed is a good material to try out this threading with. Many arrangements of the threading draft are possible. From A to B of the draft can be used as a border, repeated as desired, and then from B to C repeated for the center. These could be worked out attractively in heavy linen floss for a luncheon set if desired, or another possibility is carpet warp used for all the black squares and cotton boucle' for the /'s as shown in the threading draft. We used this threading with No.20 gray linen set in a 20 dent reed, with No.10 mercerized cotton thread for an interesting stripe of color. The linen was sleyed 3 threads in one dent, skip a dent, and one thread in a dent for the center B to C. And the /'s which were of the No.10 mercerized cotton threads were also one in each dent of the reed. On the threading draft the empty squares indicate skips in the reed.

The order of the weaving for the levers of the Structo loom is as follows, - 1&3 once, 2 alone once, 1&3 once, 2&3 once, repeat this as desired. For a treadle loom the fourth harness can be tied to treadle 1, and also tie the second harness and the fourth harness for treadle 2. This is represented by the 0's on the tie-up draft as it is given. Much interesting variation can be made on this threading also. This makes a combination of plain weave with an open weave similar in effect to the Bronson type of weaving.

Again may I thank you all for your loyal support of Handweaving News during this past year, and hope that you have found it of interest and helpful so that you will wish to continue your subscription for the coming year of 1942.

With sincerest good wishes to you all for a Merry Xmas, I am
Most sincerely yours,

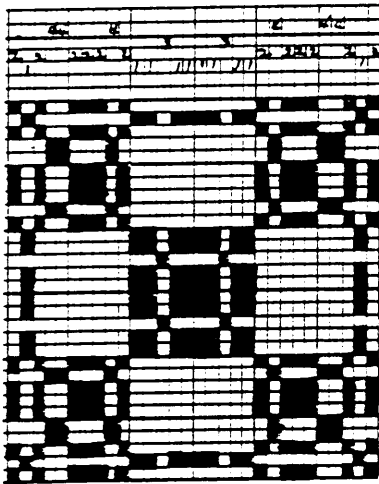
Nellie Sargent Johnson

December 1941

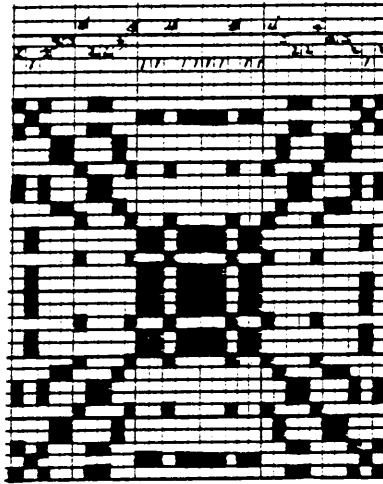
Nellie Sargent Johnson 12489 Wendota Ave. Detroit, Mich.

* HANDWEAVING NEWS *

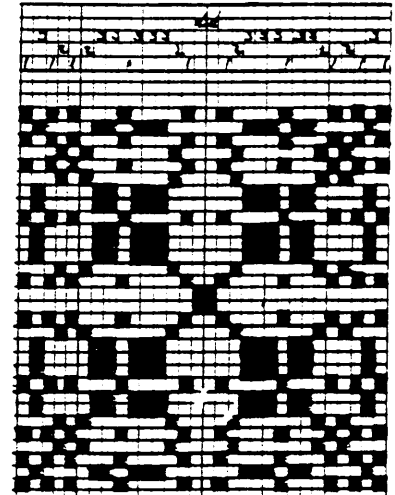
Key Drafts and Pattern Effects using codes for "Francis Scott Key."



Code III.



Code II.



Code I.

Designing Your Own Name Pattern Drafts.

We all are familiar with many of the old Colonial Patterns which have been named after persons. The News this month presents a method of using a code of the alphabet to produce name patterns. This clever idea is not original with me, but was explained to me by Mrs. Rogers of California, and I believe originated with Miss Nora Pfeiffer. The method here shown is an adaptation of my own using key drafts to write the plan instead of making a threading draft directly from the letters as was Miss Pfeiffer's plan.

Explanation of the Code. We have used the following codes as given below for our drafts. The numerals at the side represent the 4 pattern blocks, and the letters those of our alphabet.

Code I.
 1. a b c d e f g
 2. h i j k l m n
 3. o p q r s t u
 4. v w x y z

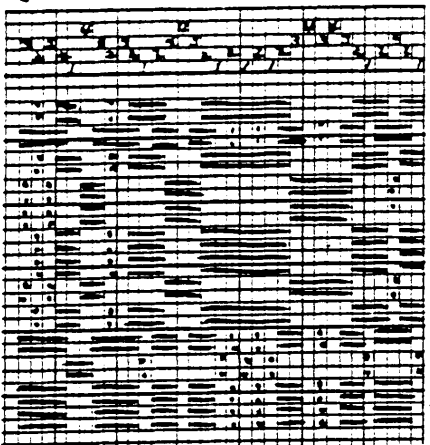
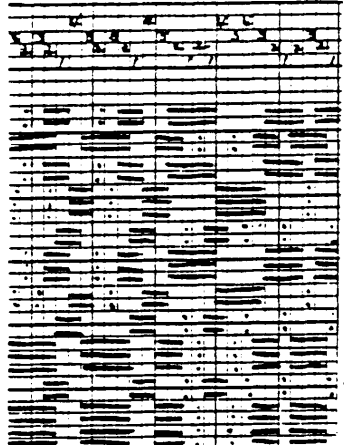
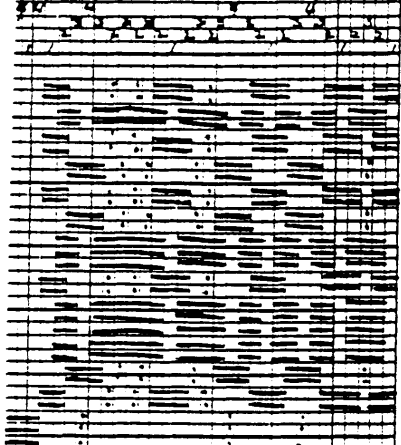
Code II.
 1. q w e r t y
 2. a s d f g h
 3. z x c v b n m
 4. i o p u j k l

Code III.
 1. q w e r t y v
 2. i o p a s d f
 3. g h k l z x v
 4. b n m c j

Take a piece of cross section paper, use four lines, one for each pattern block, to write the key draft. Take for instance the name Francis Scott Key as given above. Use Code I. F is on line 1 so write 1, R is on line 3, A is on line 1 again, N on line 2, C on line 1, I is on line 2 again, S is on line 3. Scott also begins with a line 3 which will make a two unit block on line 3, C is on line 1 again, and O T T all three are on line 3. Key is written on line 2, I, and 4. Use 4 as the center of this key draft and repeat back to beginning in reverse order. This makes a balanced key draft from which the pattern effect can be drawn down below. The second design shown above is made using the same name but taking Code II as a basis for the key draft. The third design uses Code III in the same way. Of course you can make any arrangement of the letters of the alphabet to make your own code if you wish, but the codes given at the left are the ones we have used.

Drawing down the Pattern Effect from the Key Draft. In all of the patterns given here the unit blocks of the pattern effect are drawn down the same size as the unit blocks of the key draft and in the same order in which they occur in the key draft. Or in other words the pattern is drawn down below the key draft "as it is drawn". As will be seen from the above drawings a different pattern results from each code. Threading drafts for these three patterns with their check drafts are given at the top of Page 2.

Threading Drafts and Check Drafts for Pattern Effects on Page 1.

One-half of one repeat	"Francis Scott Key"	One-half of one repeat
c	c	c
		
Code III.	Code II.	Code I.

Threading Drafts. It is possible to write threading drafts either from the key draft directly or from the pattern effect drawing. It is generally easier we have found, to write it from the pattern effect drawing, and even then care should be taken to write it so as to get the woven effect as near the pattern effect design as possible. To do this follow down the diagonal of the pattern effect drawing and write the threading draft the same size and on the required harness as the blocks occur. After the drafts are written for the threading, in order to find out if the woven effect will be what is desired, draw down check drafts below the threading drafts, as has been done above. Also in order to have the woven effect as near the pattern effect drawing as possible, it may be necessary to weave the pattern according to the order of the diagonal of the pattern effect drawing instead of in the order of the threading draft. The numbers at the sides of the check drafts as given above refer to the order in which the pattern blocks of the threading draft are woven. The purpose of the check draft is to catch any threading mistakes which may occur when writing the drafts, and to see what the final pattern woven effect will be. The threading drafts as given above are just one-half of one repeat. For the full repeat just reverse them back to the beginning, of course leaving off the first pattern block as is usual.

Tie-up. The tie-ups for these patterns are the standard regular four harness loom tie-up for over-shot patterns. Tie harness 1&2 to treadle 1, 2&3 to treadle 2, 3&4 to treadle 3, 1&4 to treadle 4, and 1&3 for one tabby and 2&4 for the other. For the Structo loom of course use the levers 3&4 for treadle 1, 1&4 for treadle 2, 1&2 for treadle 3, and 2&3 for treadle 4.

On the next page are some arrangements of patterns written on the three codes on my own name "Nellie Sargent Johnson" with the threading drafts and their check drafts below. Note that code I generally makes a pattern with few of the 4th pattern blocks due to the fact that the most common letters of the alphabet occur on the first three lines of this code. That was why we mixed up the order of the letters more for the other two codes. Code one often makes just a three block pattern as it does in the code I pattern of my name on Page 3.

To those of you who have been studying my draft writing lessons these drafts should not present any difficulty, and it is much fun to make them and see how your own name patterns work out. I am now offering lessons on draft writing to those interested for \$3.50 a lesson. I should be pleased to know if the methods explained above are clear.

These designs and their threading drafts were worked out by one of my students Mrs. Lillian Cowley. We hope you will enjoy them and find them of interest.

January 1942.

Nellie Sargent Johnson

12489 Mendota Ave. Detroit, Mich.

Patterns in Three different Codes on the name of "Nellie Sargent Johnson."

c Threading Draft - One half

2

1
2
1
2
3
2
3
2
1
2
1
3
1

Code I.
Key draft

Pattern effect

Check Draft

c Threading Draft - One half

2

1
2
3
2
4
2
4
2
1
2
3
4
1
4
3
1

Code II
Key →
Draft

Check Draft

c Threading Draft - One half

1

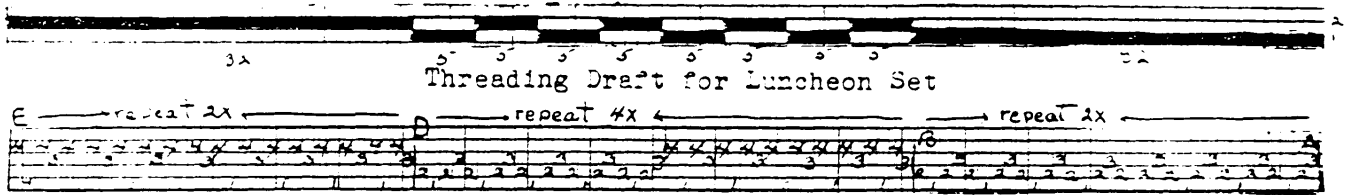
2
3
4
2
4
2
3
2
1
2
1
4
3
1

Code III
Key Draft

Check Draft

Handweaving News

Two block Key Draft Figure No.1



Modern Effects with "Summer & Winter" Weave.

Of late some of my Wayne University people have been experimenting to design modern effects with Two block Patterns. Some of the results I am happy to present to you here, and hope you will find them of interest.

Types of Pattern. The key drafts for these are all of unequal balance, or in other words are a full repeat for the width of the loom. They do not center as Colonial patterns do. It is easy to draw out the pattern effects from the key drafts on 20 to the inch cross section paper, then the same proportions can be translated into inches and followed when weaving the required sheds. Designs at Figure No.2 and 3 are drawn down from Key draft at Figure No.1, but reduced to one unit for every five of the original key draft so as to conserve space here, and yet show the pattern effects. Designs for napkins are above the place mat.

Materials used for these luncheon sets. Warp 420 threads of No.20 mercerized cotton set at 30 threads to the inch. Pattern weft for No.2 was of pale yellow mercerized cotton, and for No.3 pale pink, both purchased from Lily Mills Co, and size No.20. The plain weave tabby was of 30/3 fine rayon, a special from Penland School of Handcrafts, Penland, N.C.

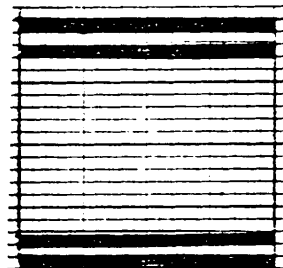


Figure No.3

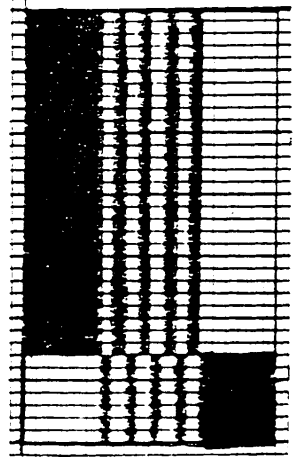
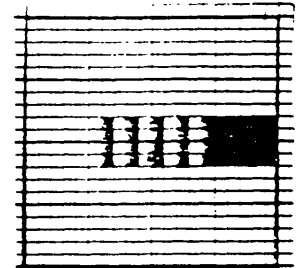
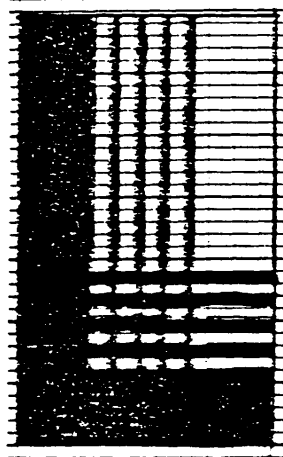


Figure No.2

Explanation of Threading Draft below Key Draft at Figure No.1. Begin at A on the threading draft. Put 2 warp threads through the first two heddles only. Then thread to B as given on the draft, then repeat from A to B again. This gives the required 30 units of 4 threads each as per the key draft. Now thread from B to D four times. Then D to E twice. Thread the last two heddles double as in the beginning.

Units of the Weave. Note that one pattern block is threaded on harness 3,2,1,3 or four threads for each unit of the cross section paper key draft. And for the second pattern block thread harness 3,4,1,4, for each unit of the key draft. This method of threading "Summer and winter" patterns is one of my own devising. It is written this way so the plain weave sheds will be 1&3 and 2&4, and also the regular loom tie-up does not need to be changed. It seems more logical to me to do it this way.

Method of Weaving. Figure No.2 and No.3. The "one and one" method of weaving is used for both of these luncheon sets. Or in other words weave one shot of pattern weave on pattern shed 3&4, a shot of A tabby, one shot of pattern weave on pattern shed 1&4, then a shot of B tabby. Repeat this over and over for the distance desired. For Figure 2, weave 3/4" for hem of plain weave, then 12 1/2" of pattern shed as just described. Then for the second pattern shed, weave one shot of pattern weft on pattern shed 1&3, one shot of A tabby, one shot on pattern shed 2&3, one shot of B tabby. Repeat for 5", then weave 3/4" plain weave for the hem. For the napkin weave 5 1/2" of plain weave tabby weft, then two inches on pattern sheds 1&2 and 2&3, with plain tabby after each shot as described, then 3 1/2" of plain weave. This makes a very attractive place mat and napkin.

Figure No.2 and No.3 were designed and woven by Mrs. Helen Hill.

March 1946 Nellie Sargent Johnson 12489 Mendota Ave. Detroit, Mich.

Weaving for Figure No.3, Page 1. The napkin has two pattern weave stripes on each end and is woven as follows. Numerals refer to levers of the Cornish loom, for looms with a sinking shed, use just the opposite harnesses. Weave $\frac{1}{4}$ " plain weave for the hem. Then for the continuous pattern stripe; - weave harness 1 alone with pink, then A tabby plain weave, 3 alone with pink weft, B tabby plain weave. Repeat for $\frac{1}{4}$ ". Then weave the opposite stripe for $\frac{1}{4}$ " as follows; - 2&3 one shot of pink weft, A tabby plain weave, 1&4 one shot of pink weft, B tabby plain weave. Repeat the first stripe for $\frac{1}{4}$ " more, then weave 9" white plain weave tabby. Repeat the three stripes on the opposite end in the same manner as described, and weave $\frac{3}{4}$ " more plain weave for the hem. This is a simple plain napkin but is very attractive.

Weaving of the place mat at Figure No.3. on Page 1. Weave $\frac{3}{4}$ " plain weave for the hem. Then 1), weave one shot on harness 1 alone, A tabby, one shot on harness 3 alone, B tabby, repeat this for 4" for the solid border at the bottom of Figure No.3. Then 2), Weave 1 shot on harness 3&4, A tabby, one shot on 1&4, B tabby. Repeat this enough times to make $\frac{3}{4}$ " square. Repeat 1) and 2) for a total of 4 times, as shown at Figure No.3. Then repeat 2) for 9" and finish with a $\frac{1}{4}$ " plain weave hem. Many other arrangements of this simple threading can be made in the same way, and this offers an interesting field for the weaver who wishes to use an old technique in a new way.

Luncheon Set Designed by Mrs. Flora Holden for a Warp of 300 Threads.

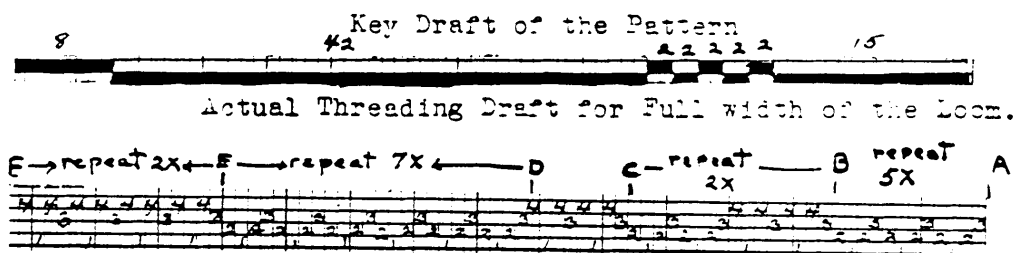
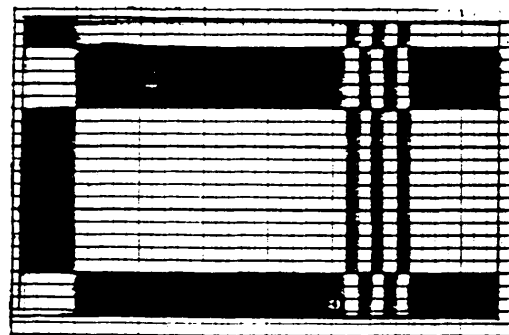
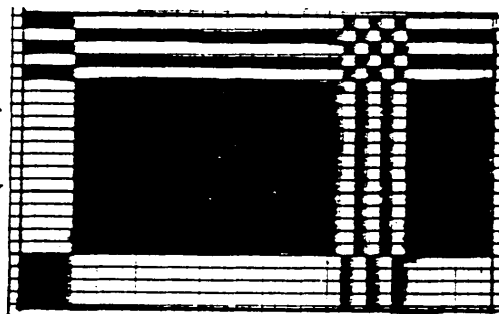


Figure No.4

This pattern at Figure No.4 is of the same type but planned a bit differently. The warp was regular cotton knitting-cotton set at 15 to the inch, and 300 threads for the width. The key draft and threading draft were planned for 300 threads as shown above. The pattern weft was a rather coarse gray cotton mercerized boucle', and the plain weave tabby was of material like the warp. This set was much heavier and of quite different texture than the one shown at Figure No.2 and 3. It also could be woven in many other arrangements of the pattern. No napkin is shown, but several attractive arrangements are possible on this same draft. The finished dimensions of this place mat are 13"x18" hemmed.



The top design of Figure No.4 was woven in "one and one" method also. To weave this, use one shot of gray on harness 2&3, A tabby, one shot on harness 1&2, B tabby. Repeat 5 times. This weaves pattern block No.1. For pattern block No.2, use one shot on harness 3&4, A tabby, one shot on harness 1&4, B tabby. Repeat this 5 times for pattern block No.2. Repeat again pattern block 1, then again pattern block No.2, then pattern block No.1 again. Pattern block No.2 weaves the large center block and is repeated for 7". Then weave pattern block No.1 for 2", and finish with enough plain weave for the hem. For further ways of using the technique of "Summer and Winter" refer to the March 1941 copy of Handweaving News which is still available if anyone wishes to have it at 45¢ each.

Key Drafts for Similar Patterns.

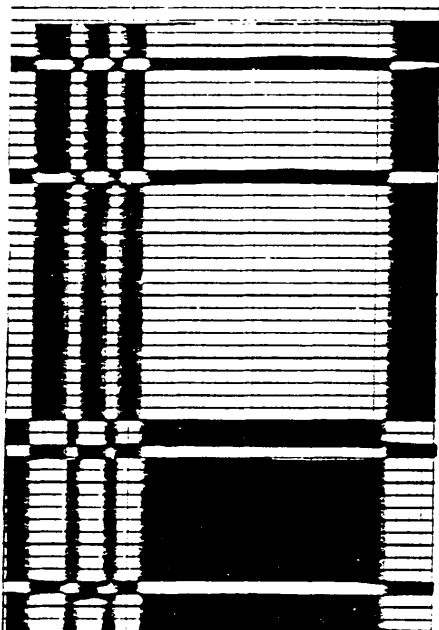


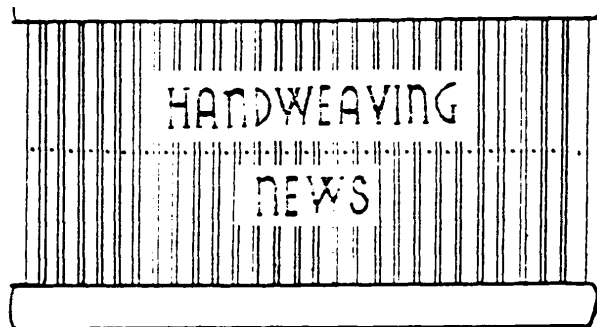
Figure No.5

The pattern effect at Figure No.5 was designed and woven by Thaddeus Zlotock, a student in my Wayne University class. This two block pattern can be woven in the "Summer and Winter" weave as has been described on Page 1 and 2. But his arrangement was woven in an eight harness damask weave, which may also be of interest to those of you who have looms of more than four harnesses. It is another way in which these two block unbalanced "modern" arrangements may be used. For this use 40/2 linen warp set 30 threads to the inch. Weft of the same in natural linen. 420 threads required for the full width of the pattern or 105 units. For each unit one square of cross section paper 20 to the inch was used. Thread one pattern block on harness 1,2,3, and 4; repeat 11x. Thread the second pattern block on harness 5,6,7, and 8, repeat 61x for the large block. Then block one repeated 6x, block 2 repeated 3x, block 1 repeated 6x, block 2 repeated 3x, block 1 repeated 9x, and block 2 repeated 6x. This is shown on key draft above at No.5.

Method of Weaving the 2 block 8 harness Damask.

To weave pattern Block I, use levers of the Structo loom as follows, - one shot on each shed, - 1&2&4&6; 2&3&4&8; 1&2&3&5; 1&3&4&7. For Block II, use levers as follows, - one shot on each shed, - 2&5&6&8; 4&6&7&8; 1&5&6&7; 3&5&7&8. To weave the place mat as shown at Figure No.5, proceed as follows, - Weave a hem of plain weave for $\frac{1}{2}$ ", then repeat Block I for $\frac{11}{8}$ " one and one-eighth inches; then $\frac{1}{8}$ " for Block II; $\frac{4}{8}$ " for block I; $\frac{1}{8}$ " for block II; $\frac{1}{8}$ " for block I; $\frac{8}{8}$ " for block II; $\frac{1}{8}$ " for block I; $\frac{2}{8}$ " for Block II; $\frac{1}{8}$ " for block I; one and one-eighth inches; then $\frac{1}{2}$ " plain weave for opposite hem. The weaving is given in inches so the proportions of the figure can be correctly maintained, rather than giving the exact number of times each block is repeated, as the material used would influence the number of times the block would be repeated. Any desired arrangement can be used for the napkin which will carry through the same design. The one used in weaving this was to weave the upper part of the place mat until it was square.

This News was written in response to several requests for modern arrangements for luncheon sets which could be used on either a four or an eight harness loom. They are new and all designed by students in my class at Wayne University this past fall. It would interest me very much to know how you like such material, and if you wish to have more of it. Of course these black and white illustrations are much more sharp and glaring than the woven fabric, and the difference in woven texture is not nearly as startling. I have never seen anyone else use a two block pattern design in this way. If you have, will you let me know?



Some New Ideas for Two Harness Weaving.

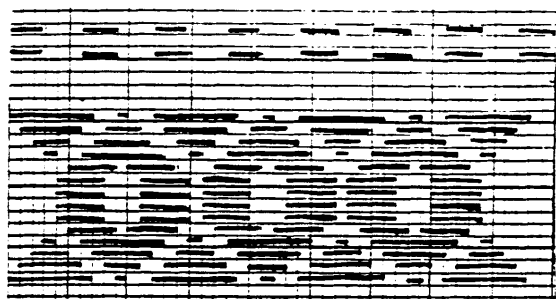
Many subscribers to Handweaving News are using two Harness looms, and in answer to a number of requests for material for this sort of weaving, I am presenting one of the things which members of my classes at Wayne University have worked out. The two harness loom is a simple tool and many people do not seem to realize that it has as many real possibilities for interesting and unusual weaving. Because it is simple the weaver has to have more knowledge concerning its use, to produce fabrics of good design, texture, and color.

For the benefit of those who wish more ideas as to what may be done on two harness looms, I will refer them to the new compilation of back numbers of handweaving news, which have been assembled into Volume II, and which sells at \$3.50 a copy. It contains much that is useful for the advanced weaver as well as for the beginner. Those of you who are using either the heddle loom or a regular two harness loom of any sort will find this volume of especial help and interest.

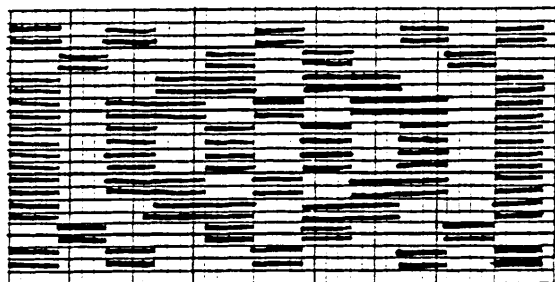
The threads and yarns used for all of the weaving described this month were the Maysville line purchased from Sears & Roebuck Co. - namely carpet warp, fast color; Maysville Rug Filler, and Maysville Home-craft Soft Cotton yarn. Warp was set about 8 threads to the inch on a 30" new heddle loom, though a regular loom of any sort might also be used if desired.

Directions will first be given for two simple rugs. Purchase 2 balls of dark blue carpet warp to make a warp about 5 yards long 27" in width, and 2 skeins of Maysville Rug Filler dark blue, and one skein of light blue or cream white for the stripes. This is a very simple rug, easy and quick to make. After the loom has been warped and tied up so that all of the warp threads are even in tension, wind a shuttle with some of the dark blue warp thread to weave a plain weave heading about an inch wide. If the rug is to be fringed, this width is enough, but if it is to be hemmed, make this heading about 2 inches wide to allow enough to cut and to turn a good hem. After the heading is finished, wind the shuttle with the dark blue rug filler, and weave 4 inches, about 8 shots of the plain dark blue. Now put in 2 shots of the light blue, then 3 shots of dark blue, 2 shots of light blue, 7 shots of dark blue, 26 shots of light blue, 7 shots of dark blue, 2 shots of light blue, 3 shots of dark blue, 2 shots of light blue. This completes the weaving of the striped border which will measure about 13" wide. Now with the dark blue weave 27" for the center of the rug with dark blue weft, and repeat the border above for the opposite end of the rug in reverse. Then weave the plain weave heading for the other end like the first. If a fringe is to be left allow about 5" of warp where there is no weaving. And for another rug allow another 5" at least, before starting to weave again. Wind up the first rug on the front cloth beam as is necessary. If desired the flat leash sticks can be placed in the shed, before the actual weaving begins again, but this is not needed if care is used to keep the weaving straight.

Figure No.1 Brocaded Borders



A At Figure No.1 are two brocaded borders for rugs. Each square of cross section paper represents one warp thread. Find the center of the width of the weaving. Start from the center of the pattern, and with the warp threads flat go over then under the required pattern, toward the edge. Then in the same way pick up the other side of the center toward the edge. It is better to stop the brocade pick up so as to leave a few warp threads of plain weave on each edge. Turn the pick-up stick on edge and pass the weft through the picked up shed across the full width of the loom. Then put in a row of plain weave. Pick up another row of the pattern all across from edge to edge, turn the pickup stick on edge and pass the pattern weft through the shed. Then pass the plain weave shuttle through the alternate plain weave shed. Always alternate a row of plain weave between the picked up pattern rows. Two rugs can be made with the borders given here. Weave a plain weave heading of carpet warp, about an inch or so, then with dark red Rug Filler, weave 16 rows of plain weave. With

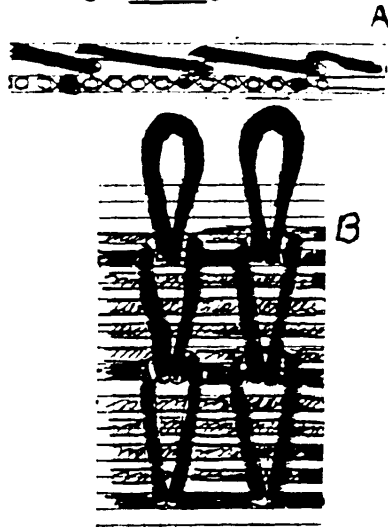


C

Home-Craft Soft Cotton in cream color, weave the plain weave back of the red which will be used for the pattern weft. One shot of the cream, then pick up over three and under three all across the width, which is shown at the top of the borders. Weave this with the dark red filler, then a row of cream plain weave, then pick up another row of over 3 and under 3 warp threads for the width, and end with a row of the cream weft. Then 4 rows of the dark red plain weave filler. Then start the wide border as shown at B, and pick up according to the pattern, alternating with the plain weave. When this border is finished, weave the over 3 and under 3 border again. Then plain weave with dark red for the center of the rug for the desired length and repeat all three of the same borders on the other end of the rug in the same way. This is a very handsome rug and the border will measure about 6-in on each end. For this rug get two skeins of rug filler and one skein of Home-craft Soft Cotton in cream. The border at C may be used in the same way and of course any combination of color can be used as desired.

Suggestions for Curtain Materials. It is very easy to plan excellent heavy glass curtains using carpet warp. On the heddle loom, thread the slits with double thread and the holes with a single thread for the width of the heddle. A regular loom would have one heddle threaded double and the next single, and sleyed the same, 8 threads to the inch, counting the double threads as one. For a warp of 314 warp threads, 4 spools of carpet warp with approx 800 yds to the spool will be needed to make a ten yard warp. About the same amount, possibly a little less will be needed for the weft if it is also of carpet warp, and it can be. On an all white or natural warp, weave with grey, beat the weft up very lightly to leave it somewhat open, and plan a simple design in a geometric figure for a repeat, of laid-in technique. For this laid-in figure, use cream color Soft Cotton, Home-craft. This can be very modern in effect and is excellent material to use this way. Another plan is to use a warp made of two threads of tan warp threaded double, and one thread of white threaded single. It can be woven with all white carpet warp; with alternate shots of double tan and single white; or bands all of tan, and all of white. An effective and quick way to weave this warp is to leave bands of open warp where there is not weaving at all. For this weave about 12" of plain weave, leave 1-in of warp free, weave 1-in, leave 6-in free, weave 1-in, leave 1-in free, weave 6-in,*. Repeat from * to * 4 times in all, then weave 12-in for top of curtain. This will make the curtain about 2 1/2 yds long when finished. Where there is no weaving, insert strips of folded paper, the exact measurement of the free strip, in the shed. When weaving is removed from the loom stitch on each side of the free strips to keep the weft in place before removing the paper strips. Also mark a piece of narrow tape at the exact place where the open and woven stripes occur so all of the stripes of the curtain will come at the same place when they are hung. This is important. These are simple and quick to do, and will be durable and satisfactory curtains.

Figure No.2 New Way of
Using Tufting Technique.



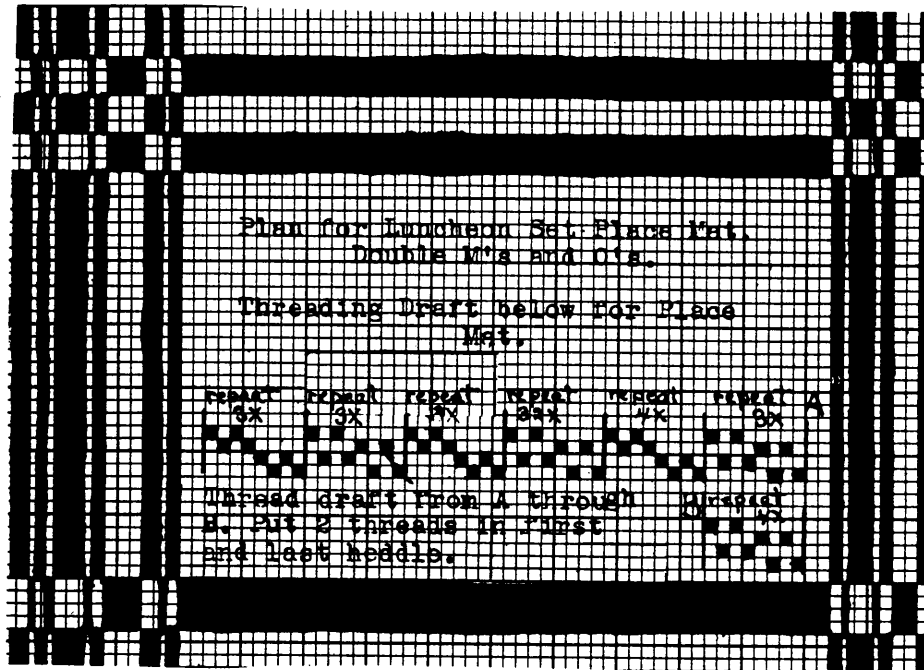
At Figure No.2 is a new way of using the tufting technique designed by Thaddeus Elotek, one of my weaving students at Wayne University. This can be effectively used for bags, pillow tops and such things; or even for a heavy drape if desired. Material used was tan carpet warp; pale yellow Home-craft Soft Spun cotton, and rust color for the tufting thread. Weave 6 shots of plain weave with the yellow weft. Then throw a shot of the rust color all across the width. Take a stick, about an inch wide. Pull up over this a loop of the rust color, leaving 7 warp threads between each loop pulled up over the stick. Do this for the full width of the weaving. Leave the stick in and weave 6 shots more of the yellow. Pull the stick out of the first row of rust and a row of loops will stand up. Throw another shot of rust and pick up loops of this, 7 warp threads apart as in the first row. Be sure the loops are directly above each other, or the lengthwise rows of loops will not be straight. Then weave 6 shots of the yellow and pick up another row of loops as before. After several rows of the rust loops have been made, slip the first row of loops one at a time

into the second row, then the second into the third row and so on. On the last row, throw a shot of rust through the shed, and as the shuttle goes through catch the loop of the previous row down. On this last row no loops are picked up on the stick and this will fasten all of the loops down. At A of Figure No.2 is shown a cross section of the warp threads, and B a sketch of the method of working. Almost any arrangement of the loops can be made, but be sure there is the right relationship between the height of the loops and the number of weft shots between the loop rows so the material does not pull. I am always glad when I can send out new ideas like this one in the News and would be very much interested to hear from those of you who try this out. I hope the method of working is clear. It could be used in many other materials even in fine weaving.

Colored Warp Spaced Far Apart. Warp carpet warp in the following Fast Colors, two darkgray, 2 light gray, one brown, one pale yellow, one brown, 2 light gray, and 2 dark gray. Thread the loom singly, one thread in a slit and one in a hole as given for the colors in the order above. Then skip two holes and 2 slits, repeat the colors as above, then skip two holes and two slits. Do this for the width of the loom. For heavy drapery material weave with natural cream color Home-Craft Soft Spun cotton. This gives a lengthwise stripe of color alternating with a plain stripe where the color of the weft thread is predominating. For very heavy material use the soft spun cotton double on the shuttle. Used single as weft, the material would make interesting luncheon sets or breakfast sets, or plain simple bag material. Women with carpet warp for weft either in the same colors as the warp or all of gray weft, and the same size spaces left while weaving as left for the warp spaces, excellent curtain material can be woven. This plan was worked out by Clara Stone, another of my Wayne students.

Luncheon Sets and Breakfast Sets. 1. Tan Warp 120 threads, threaded one in a hole and one in a slit. Weft Corn shucks, striped into narrow strips. Place a thick end against a thin end of the shuck as they are laid in the shed. And alternate a row of the shucks with a row of tan carpet warp for the weft. The natural colors of the shucks after standing in the field are very lovely. They can be dyed as one would dye cotton if colored borders are desired. Dark brown and yellow are the most effective dyes to my mind. These can be worked in as end borders with the natural colored shucks. 2. Warp of the same material or of gray carpet warp with wefts of fine cut colored percales or knit underwear make excellent place mats and runners. Cut the pieces very narrow, about one fourth inch if light weight fabric is desired. Sometimes the colors work themselves out in attractive woven patterns when colored percales are used. Contrasting borders are always effective too if desired. 3. Silk stockings cut fine and looped together are nice. A recent very modern looking luncheon set was made by bleaching silk stockings so they were very pale yellow, tan, some of them even came out a pale pink, others a grey purple very pale. These were cut in loops about one half inch wide, looped together and used as weft. They made a stunning set for a Swedish Modern China. Many other ideas are possible.

HANDWEAVING NEWS



Some Modern Variations on M's and O's Threading Drafts.

The M's and O's threading drafts are an interesting texture with which some very unusual woven effects can be obtained. The threading is often found in early Colonial American weavings and in many of the Scandinavian books as well. Its name is derived from the fact that small O's seem to appear in the small woven blocks, and the M's make up the opposite pattern blocks. This simple threading alternates first one unit of the pattern then the other unit, and each unit of this pattern is composed of eight threads, - namely harnesses 1,2,1,2,3,4,3,4 for one unit, and 1,3,1,3,2,4,2,4, for the other unit pattern block. There is no tabby weave possible on these threadings. This is the basic draft. From this many textures and other arrangements are possible. In an effort to discover what can be done with this simple threading draft, Mrs. Helen Hill, one of my students at Wayne University, worked out a sampler of different modern effects. And these will be given for you now.

Explanation of the Tie-up Drafts on Page 2. At Figure No.1 on page 2 is given the regular tie-up for the M's and O's threading drafts. Below the tie-up draft is shown the order in which each combination of harnesses is woven. For instance at Figure No.1 tie-up, treadle 1 is tied to harness 1&2. Treadle 2 is tied to harness 3&4. Treadle 3 is tied to harness 1&3, and treadle 4 is tied to harness 2&4. Below this tie-up draft the X indicates to use treadle 1 or harness 1&2 combination. The next X indicates to use the 3&4 combination or treadle 2. Note that the crosses alternate for 10 X, This means one shot on each shed alternately 10x. For weft use mercerized cotton white No. 20 on a warp of the same set 30 threads to the inch. The other pattern block is woven as indicated by the crosses below, 10x alternating treadle 3 and 4, one shot on each shed. The order of the treadling of these tie-ups looks like a threading draft written vertically. Read them from the top to the bottom. The X's indicate one color and the /'s mean another color. Gather together an assortment of different odds and ends of threads and weave a sampler. I will indicate what kinds of threads we used, but others will work just as well particularly if you like experimenting yourself. And such work is very much worth while. Most weavers perhaps would rather take and weave what some one else has worked out than to take the time to do this sort of thing, but I believe it is the only way that original effects can be gained, and it offers a wide and unexplored field for the person who really does creative work and enjoys it.

Tie-up Drafts with Order of treading below.

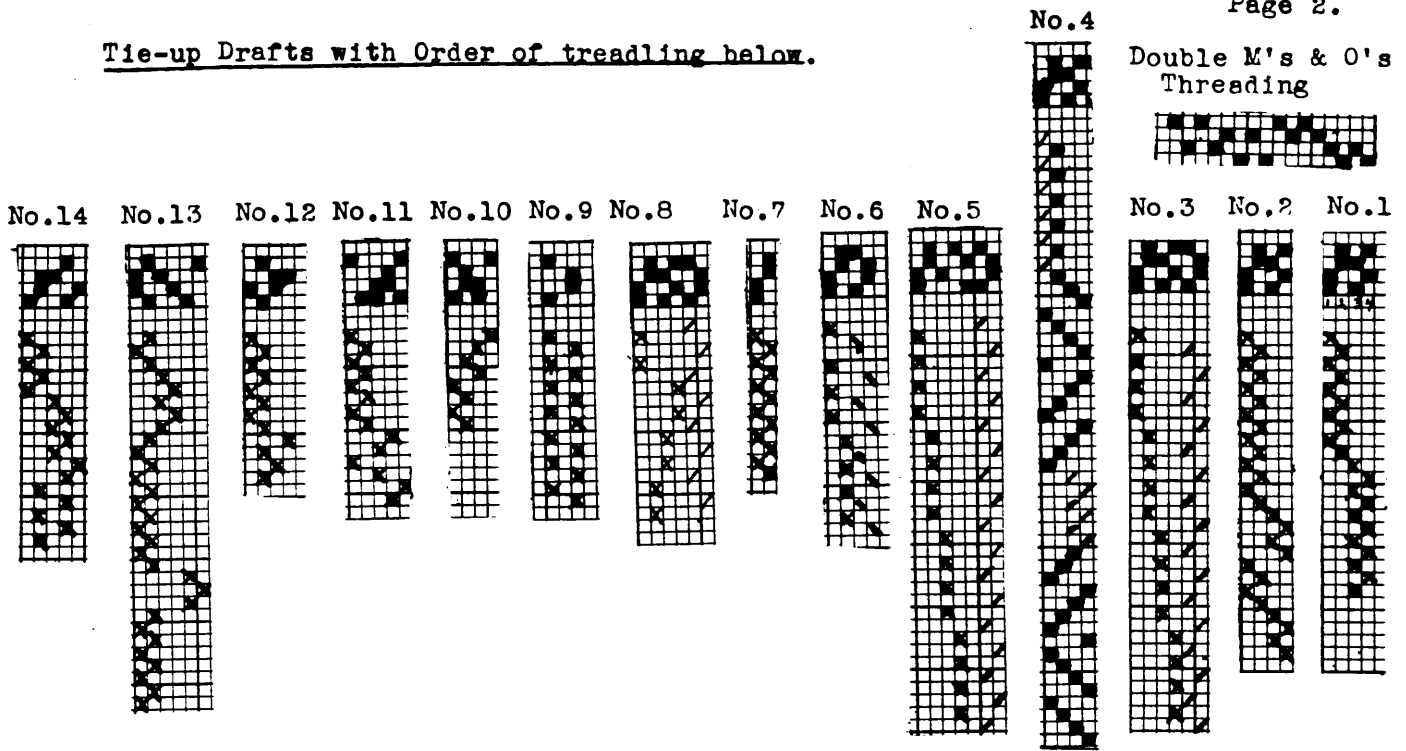


Figure No. 2 Tie-up. Same as No. 1. Weave with yellow rayon thread about the size of No. 10 cotton. Do not beat too hard and this might have possibilities for glass curtains.

Figure No. 3 In this tie-up we have added 1&4 and 2&3 combination, which is as near to the plain weave as is possible on this threading. Weave the X's with wool fabric yarn or similar thread and the /'s with 20/2 cotton. Good for an all over upholstery repeat.

Figure No. 4 Is woven with two colors of rayon thread, yellow for the /'s, and brown for the squares, one shot on each shed as indicated. This gives an unusual twill effect which might be used in many articles with good effect.

Figure No. 5 Differs from No. 3 in that harness 2 and harness 4 are tied alone to a treadle. Woven as indicated this gives an interesting twilled small over-shot pattern, with the use of 1&4 and 2&3 as a plain weave after each pattern shot of the twill.

Figure No. 6 Gives a similar effect but uses only two of the over-shot blocks which alternate to give a vertical effect. Good using all wool weft of fabric yarn in two colors. Our sample was worked out in grey and green wools.

Figure No. 7 Was worked out with a peach color rough cotton alternated with light gray carpet warp. This uses only two of the harness combinations.

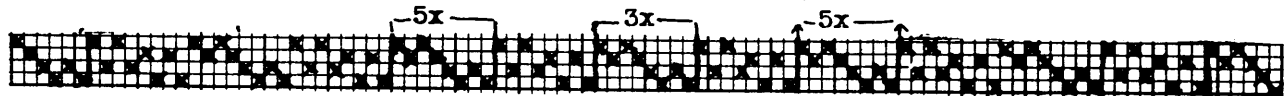
Figure No. 8 is similar to No. 5 but was woven with gray carpet warp and fine rough cotton

Figure No. 9 Try several variations using color. 2 shots of gray carpet warp, one rose bouclé cotton, 1 white rough cotton, one rose, and repeat. For another sample one shot of each color repeated. For another sample one gray shot, 3 white, one gray, one white, one gray, and 3 white, repeat from beginning as desired. This is simple but right colors and threads will develop unusual texture.

Figure No. 10 - 14 From here on the materials have long warp skips on one side and heavy threads such as candlewick cottons and heavy white rayons were used. Note that most of these tie-up use some of the harnesses tied up singly.

Key Draft for Sampler No. 2

Figure No. 16
Threading Draft for Figure No. 15 arranged for Warp of
 180 threads 20/2 cotton, 30 threads to inch.

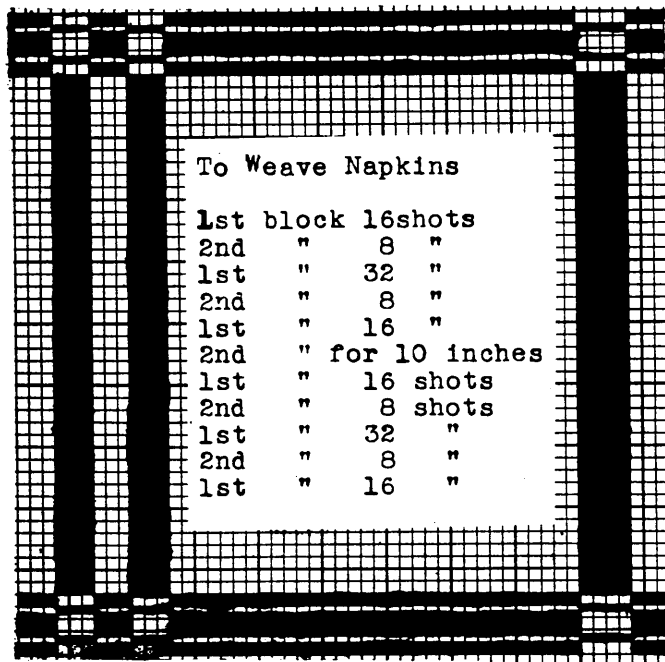


This is the complete threading. The extra threads at the beginning and end of the draft are put in to use up the required number of threads. Note that there are 8 warp threads for each unit of the key draft. Directions for the weaving are given on the next page. Of course any of the tie-ups given above could also be used if desired. This second sampler was designed and worked out by Clara Stone.

Weaving of sampler No.2

1. For the first sample, use mercerized cotton No.40 crochet. Use the regular tie-up as given at Figure No.1 on Page 2. Weave to square the pattern blocks. Use 1&2 and 3&4 alternately for one pattern block, one shot on each shed. And 1&3 and 2&4 alternately for the second pattern block, one shot on each shed.
 2. Horizontal stripes can be woven by weaving with 2 colors. Alternate the colors by using two shuttles. These shots can be repeated as desired. The regular tie-up is used for this also.
 3. For this variation bring down only one harness at a time in the following order, - #1,2,3,4,3,2. Repeat from the beginning as desired. This gives the effect of a closely woven over-shot material if well beaten down.
 4. Another variation is to use harness #1 alone; then #2 and 3; #4 alone; then #2 and #3, repeat as desired. Almost any kind of yarn can be used depending on type of fabric.
 5. Try mercerized cotton No.3 or No.5. Weave the regular tie-up pattern blocks. The effect is of course much heavier than that of No.1 above.
 6. With mercerized cotton No.3 or No.5, weave as follows, - harnesses #1 and 2; 3 alone; 2 alone; and 3 & 4 together. Repeat as desired. A heavy texture good for upholstery.
 7. With fine homespun, Millen tweed yarn is excellent, weave harness 1 alone, 2 alone, 3 alone, and 4 alone. Repeat as desired. Beat up well. Would be excellent upholstery.
 8. Another finely textured material can be woven by using harnesses 1 & 2; 2&3; 3&4; 1&4. Repeat as desired. The other pattern block can be woven in the same way by using 1&3; 2&3; 2&4; and 1&4. 40/2 linen or cotton about the same size would make a very firm close luncheon set material if beaten down close and firm.
- Many more combinations are possible. These samples were all woven, each with one kind and size of yarn. Just using different kinds and sizes of yarn would vary the effects gained, and of course colors would add interest too. One gets surprising results from this kind of experimenting which are often most worth while.

Luncheon Set in Double M's and O's. Diagram of the place mat and key draft and threading draft given on Page 1. Diagram of napkin given below. Designed and woven by Clara Stone. Warp 420 threads of No.20 mercerized cotton, 40/2 linen could be used also. Weft #20 mercerized cotton, color Cork, obtained from Lily Mills Co. This is an unbalanced



threading draft which does not center, and is of the same character as those given for the "Summer and Winter" weave in March Handweaving News. To weave the place mat, weave the 1st pattern block, 1&3 and 2&4 alternately for 24 shots. The 2nd pattern block 1&2 and 3&4 alternately for 8 shots. Then the 1st block 16 shots

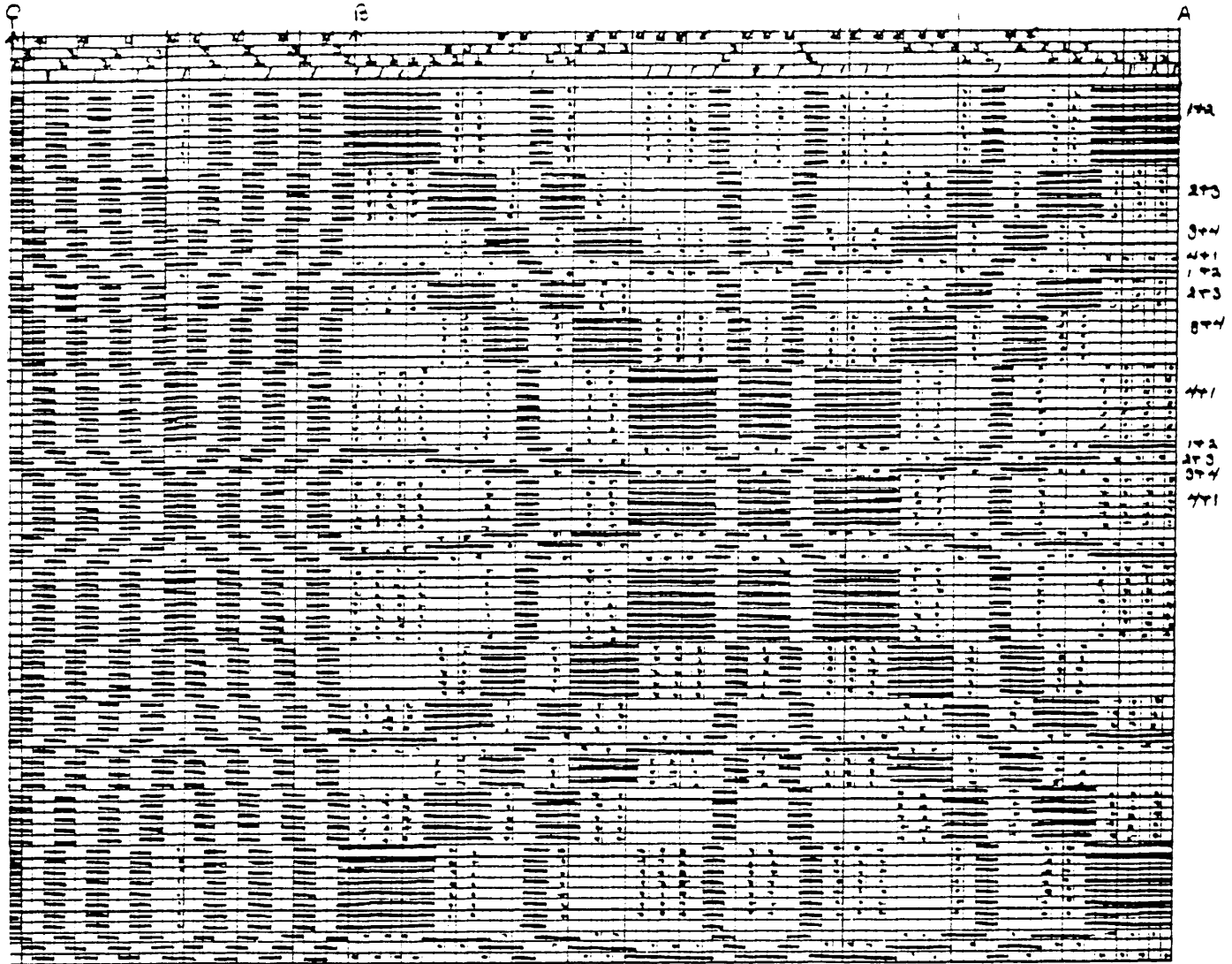
2nd, -	weave 8 shots
1st, -	" 40 "
2nd, -	" 8 "
1st, -	" 16 "
2nd, -	" 30 "
1st, -	" 24 "
2nd, -	" 8 "
1st, -	" 16 "
2nd, -	" Weave for 12" for center.
1st, -	" 16 shots
2nd, -	" 8 "
1st, -	" 32 "
2nd, -	" 8 "
1st, -	" 16 "
2nd, -	" 26 "
1st, -	" 16 "

(It is necessary to count the number of times each pattern block is woven so the mats will all be the same.

Wanted to Buy, - STRUCTO LOOM -

If you have a Structo loom you wish to sell, will you kindly write to me. Please give me full particulars as to size, condition of loom, how long been used, and how much you want for it.

HARDWEAVING NEWS

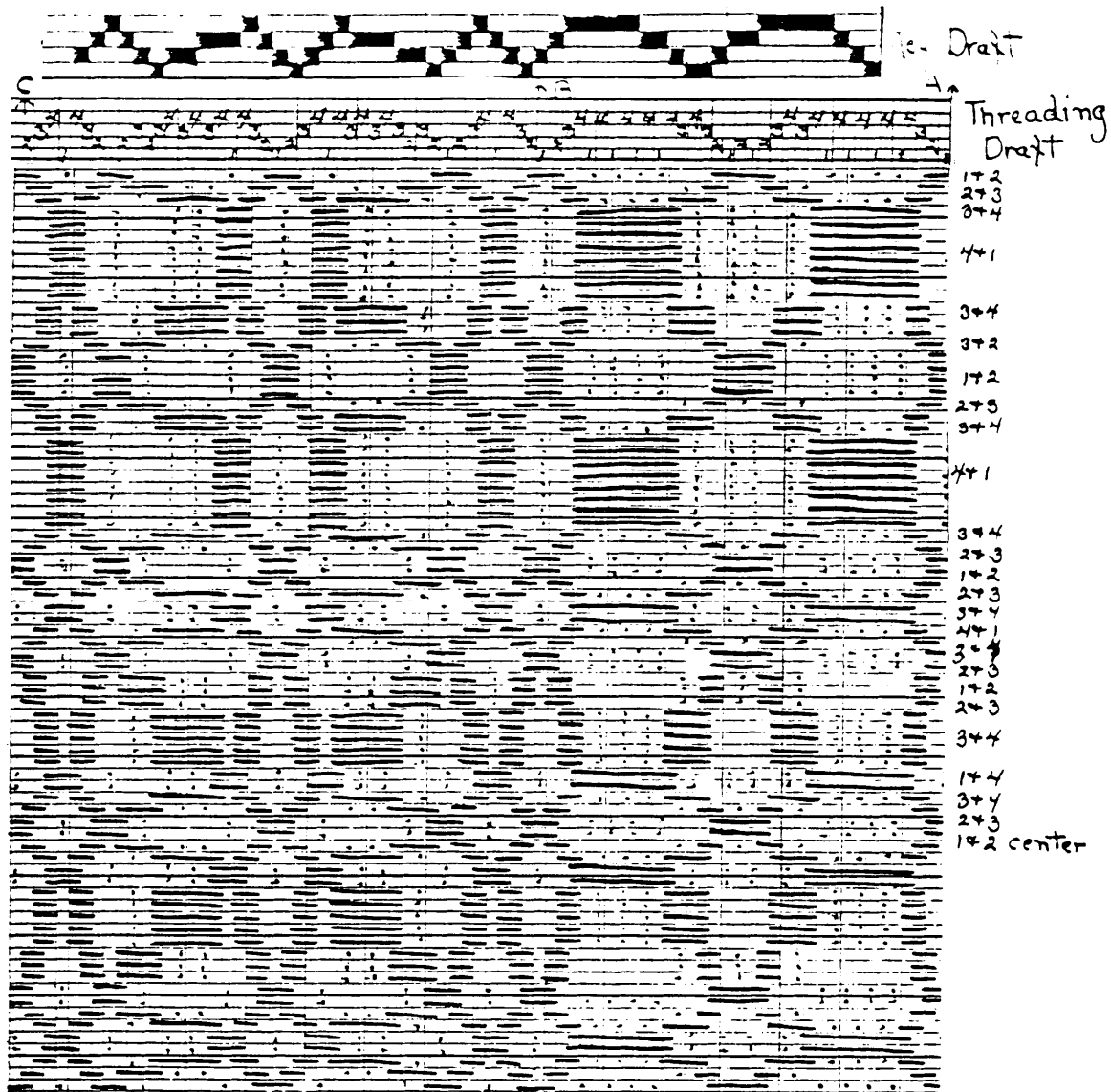


Designing Four Block Over-shot Patterns.

There are several ways of designing four block over-shot patterns. Three of these will be presented here for you. The first method is one based on the simple twill. The key draft, threading draft, and check draft are shown above for this. Start with the twill, namely the 1,2,3, and 4 pattern blocks in order. Make the sides of these blocks different, repeat them as many times as desired up to a center, and then reverse the order back to the beginning. The threading draft is written from the key draft by using two threads for each unit of the key draft pattern blocks. This is the way the Colonial so-called "Sunrise" patterns were developed.

To arrange the above threading draft for a warp of 400 threads, proceed as follows, - Thread the first and last heddle double, begin to thread 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, 1; The A to C, or one repeat 105 threads, repeated 3 times, now A to B once. At the end thread 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, which takes up the warp of 400 threads.

Herringbone Order of planning a Four Block Pattern



The pattern given above is based on the herringbone order of threading, namely 1,2,3,4, 3,2, and repeat. Note carefully how the key draft above follows this order, making the pattern blocks of different sizes. Given above is the key draft, threading draft from this and the check draft below. The numbers at the side of the draft indicate the order of using the harnesses to weave the pattern. For the Structo loom, use just the opposite levers than those given, to bring the pattern effect on top of the weaving. Most of my students who have been working with this method of designing feel that this order gives the least interesting patterns. The one given above has many variations, and may be woven in many different ways, useful for many things. As we have arranged it, A to B has been used as a border and B to C used for a center repeat, with the border A to B repeated on the opposite edge. A to C can be used as repeat if desired.

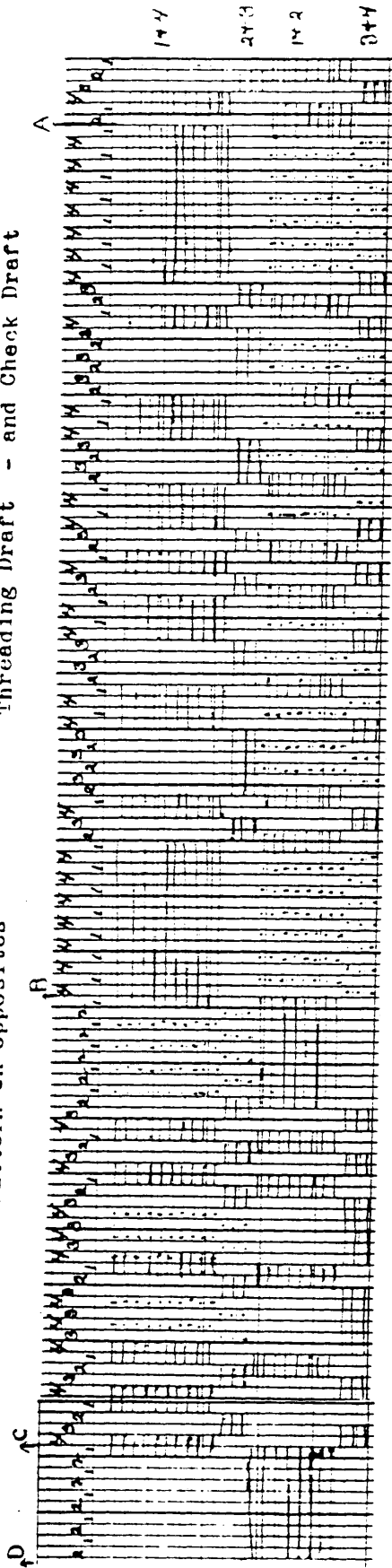
To arrange for a warp of 420 threads, proceed as follows, -
 A to B as written, equals 34 threads, then B to C or 44 threads repeated 8 times which equals 352 threads. Then repeat from A to B, 34 threads, which takes up the full number of the warp threads.

This threading draft should prove useful for small runners, bags, towels etc. where a simple threading is desired, and when set 30 threads to the inch on a fine 20/2 cotton warp may be used in many as the pattern block skips are fairly short.

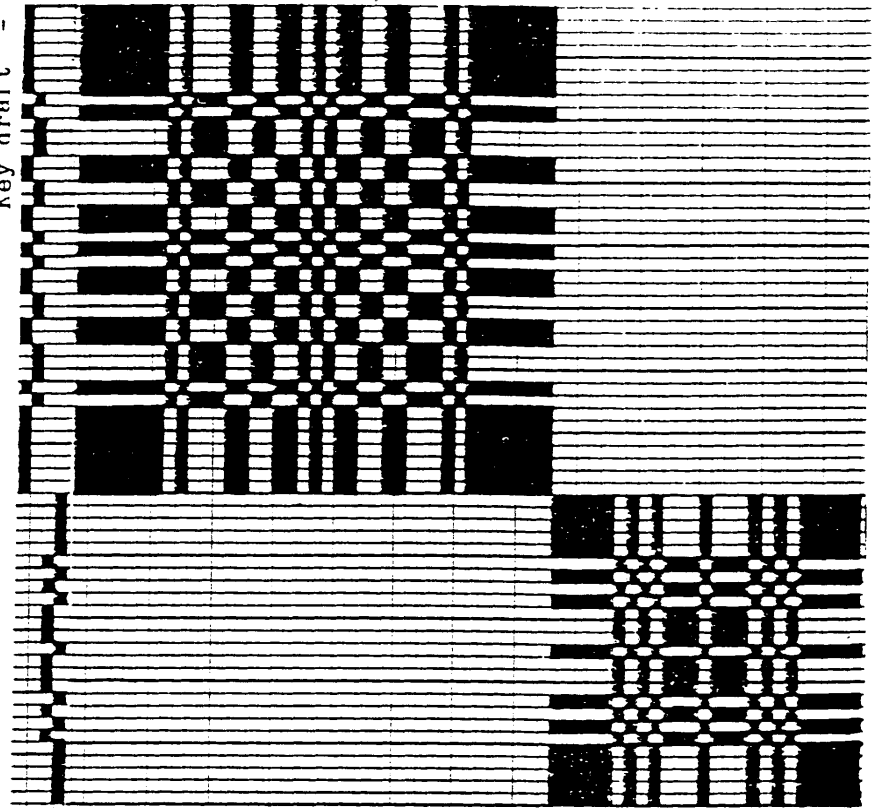
Pattern block effect

Threading Draft - and Check Draft

Four Block Pattern "On opposites"



Key draft



This third pattern design is a design "on opposites". It is not nearly as common as the two previous types of pattern, and yet holds much opportunity for clever use of the technique. Note that the pattern effect is very clear out. Compare this with the check draft of the threading draft and note carefully the two thread skips and the one thread skips. These form in the woven fabric almost a third color value in the left, while the pattern blocks are sharp and set off by small areas of plain weave. The pattern blocks are written on the 1&4 pattern block with its opposite 2&3. And the other two opposite pattern blocks are 1&2 and 3&4. Of course these patterns can be woven as is usual, but quite another effect is obtained.

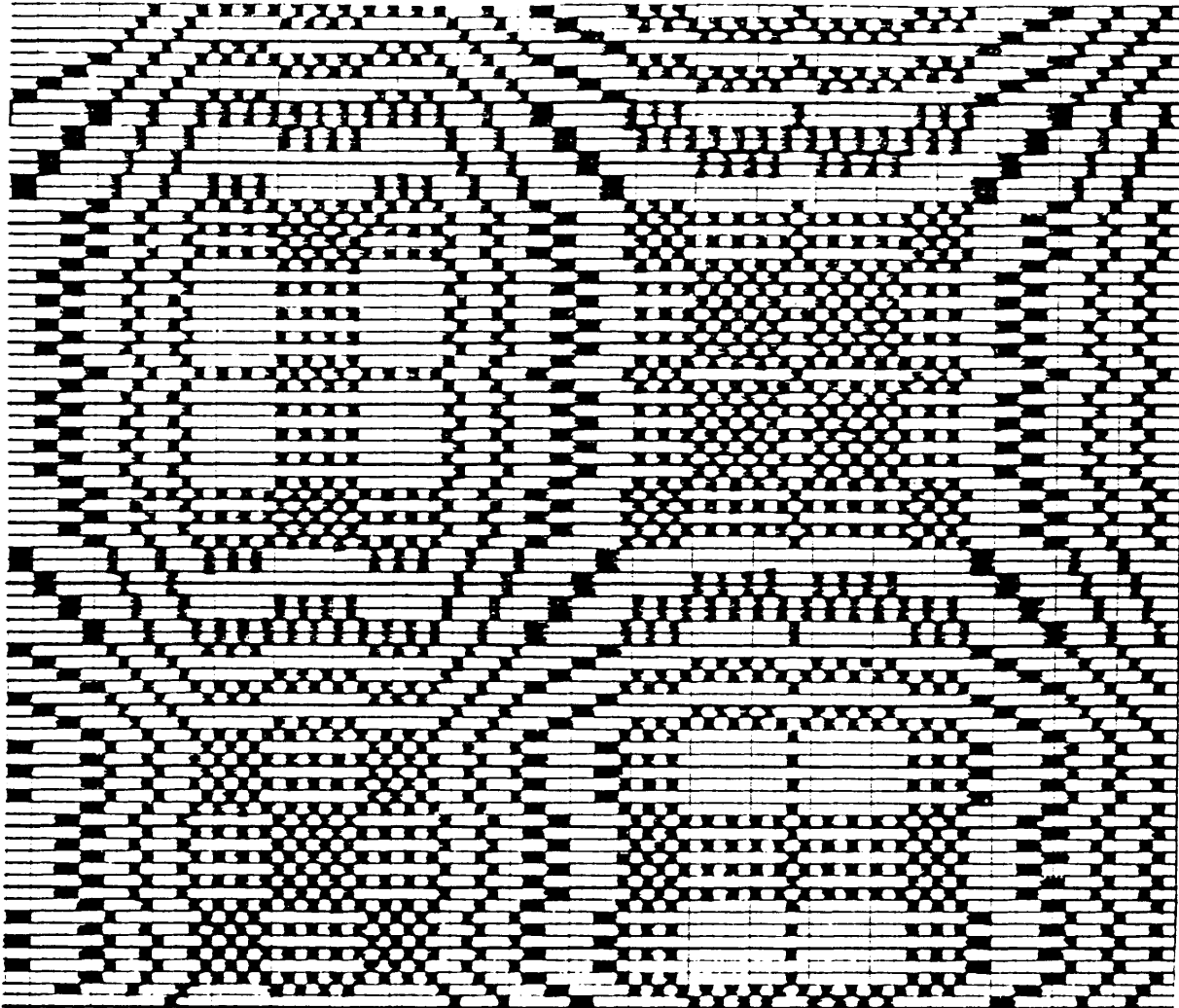
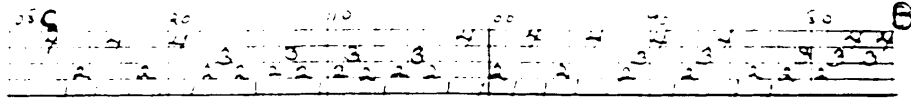
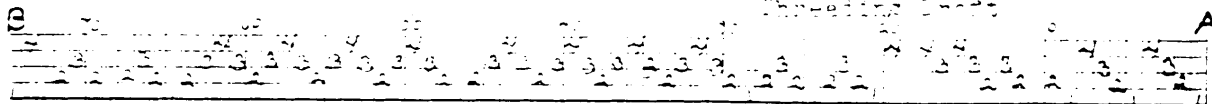
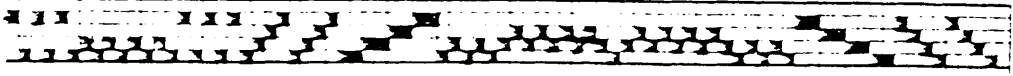
From A to B, a repeat of 78 threads was used for a border, with the center B to C repeated 6 times, then C to D, A to B again and the edge threads to balance the pattern for a 420 thread warp. This in detail is as follows, - Thread 1,2,3,4,1,2, as given then

Border A to B	equals	78 threads
B to C	"	40 threads x 6 equals 240
C to D	"	10 threads
A to B	"	78 "

End with 1,2,3,4,1,2. Be sure and thread the first and last heddle double.

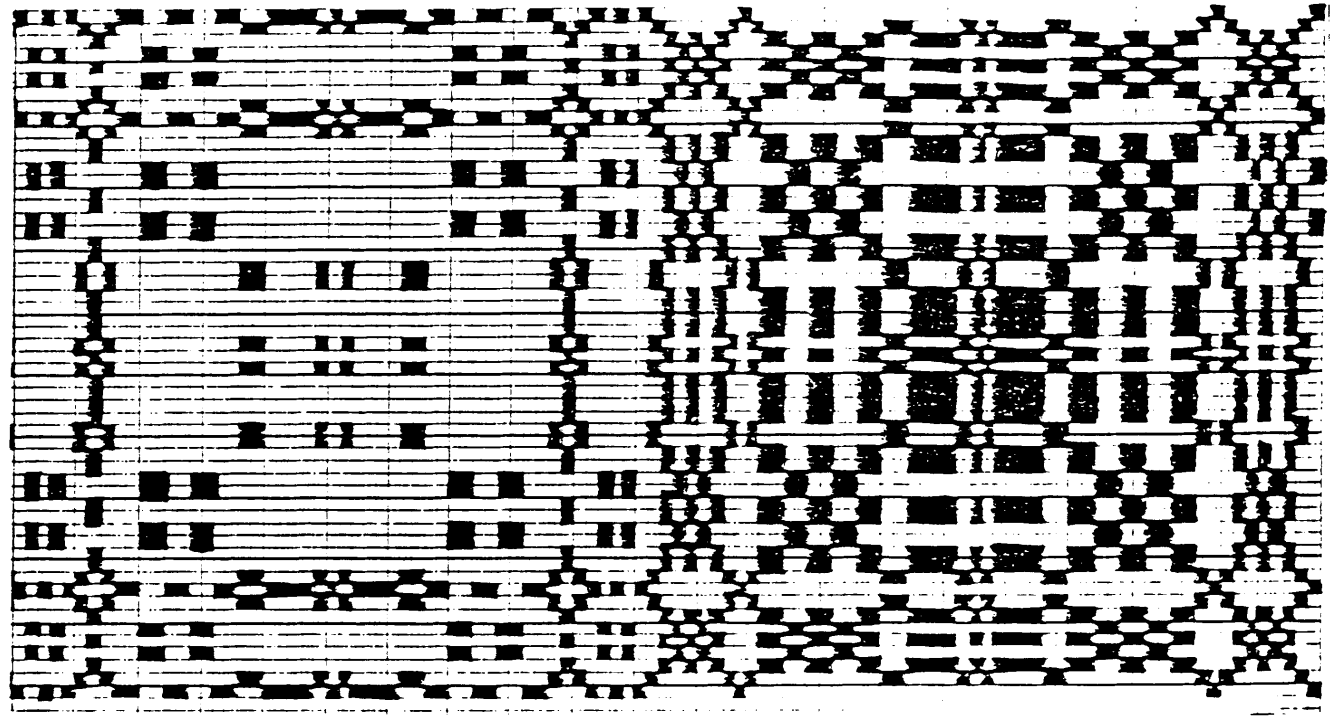
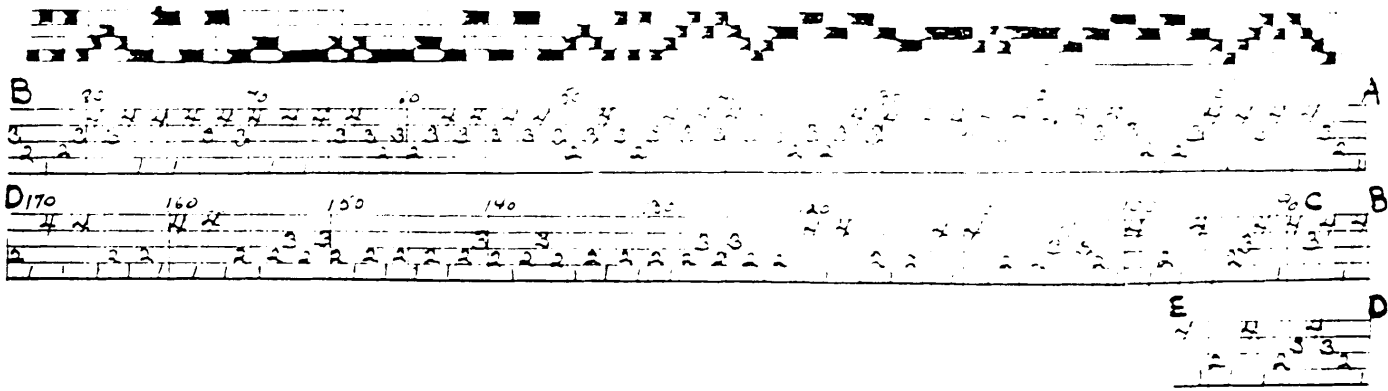
Weave to follow the pattern effect design, and square each pattern block. The center may be repeated over and over as desired for the length of the center, then the border repeated for the other end.

Key Drafts for "Twills and Squares" described by Mrs. Helen Hill.



This pattern above on the "Twills and Squares" plan is quite a different arrangement from that of the original pattern draft, and is a good example of how other patterns may be designed. Study and compare both the two key drafts and the threading drafts so that you will see just what has been done. These are large threading drafts and can be used for irons, upholstery material, and coverlets or couch covers. They are most effective when two shades of one color, or two colors, are used for the pattern weft with a body of another color. The particular pattern above has only a four thread skip so its largest, and thus would make the pattern suitable to use for a large table cover, which could be woven in two colors and covered to suit. For such a project I would suggest a 4/4 linen warp of 12 x 12, and the use of a heavy, ungerized natural cotton warp. For weft use all linen, or fine cotton or power thread. A dark linen color, natural, and pure white will give a most contrasted design.

Key Draft for "Twills and Squares" as shown by Mrs. Hill's on Page 1.



This pattern design is of quite a different character both from the original plan on Page 1 and from the design of Mrs. Hill's on Page 2. Again study and compare this key draft and the threading draft with the original plan. Some of the variations you will find are that the twills, instead of being of four thread pattern blocks, are composed of just the simple 1,2,3,4, twill order, and thus very small blocks. In a good contrast to these are the arrangements of the alternating over-lapping pattern blocks so that they are large skips which form a very bold pattern for the squares. Again this is different from the original pattern. But also note that this design does follow rather more closely than the pattern on Page 2, the order of the original plan on Page 1, but the sizes of the pattern blocks are very much different than the sizes of the pattern blocks in the Key draft at the top of Page 1. To those of you who are interested in planning and drafting four block patterns of your own this offers a new field for experiment which should be intriguing.

This is a bold pattern suitable for a coverlet or drapery material. For a coverlet the pattern should be woven in two strips and sewed together as usual. For this plan to have the center of the coverlet come at D as marked on the threading draft. The piecing will show least here. An edge border for the side of the strip can be used by repeating from A to I, as is necessary to complete.

These patterns are being sent to you in answer to several requests for more new ideas for coverlets and large projects for weavers. I hope you will find them of interest. Are you finding what you want or are there some things you would like to me and told me what you would like. Letters to me are always welcome, and yours just as well as those of someone else.

HANDWEAVING NEWS

Figure No.1

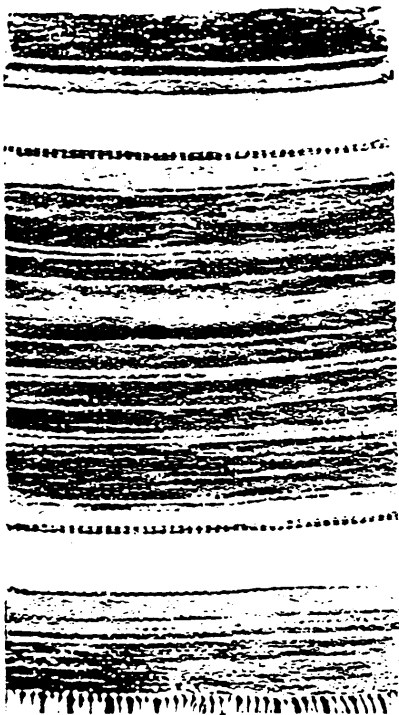


Figure No.3

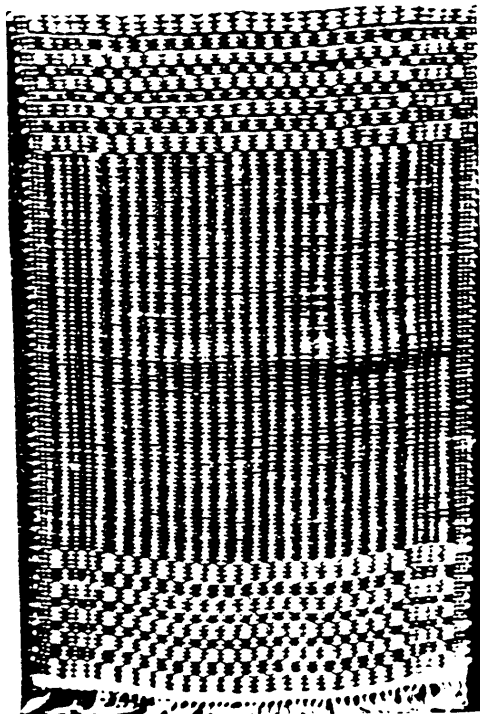
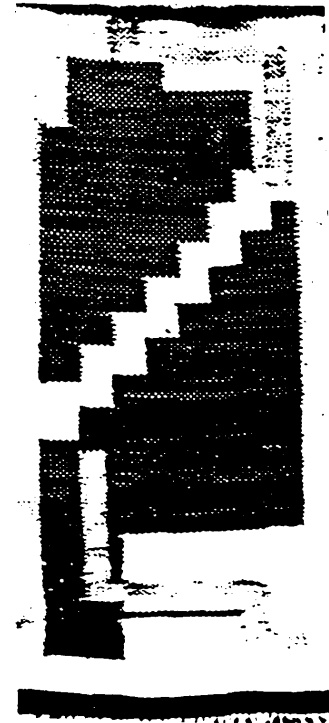


Figure No.2



A Variety of Rugs.

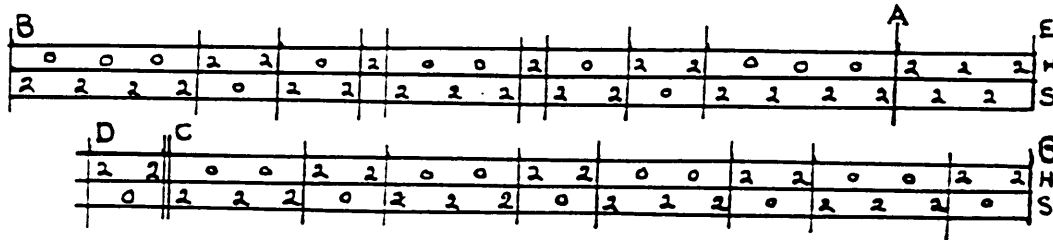
The rugs described this month have all been woven in my Wayne University weaving classes this spring, and as I have received several requests for some rugs, they are being presented here...and I hope they will prove of interest.

Rug No.1 is a simple rag rug, but thick, heavy and very durable. It was woven on a 12/4 cotton threaded double in the heddles. Sley this 2 threads in a dent of a 12 dent reed, skip 2 dents, and sley double in the next dent, and so on for the width of the warp. Weft of this rug was unbleached cotton, 10 yards at 8¢ a yard, dyed in three shades of blue, light, medium, and dark. One half yard was dyed a bright scarlet red. This red was cut into short lengths from 4 to 6 inches and laid in with the blue weft at intervals in the center of the rug. A very narrow border of this was woven on the ends, by alternating a shot of red and a shot of light blue four times. Beat hard to entirely cover the warp. Size of this rug is 20"x36". It may be woven on any plain weave set up or on a two harness loom if desired, and it is rather different from the usual 2 harness rag rug.

Rug No.2 This is also a rag rug. It was woven on the same warp and set up as rug No.1. The weft was all new plain color precasle; beige, medium blue, and dark brown. The weft strips were cut about 3/4th inches wide. The interlocked weft tapestry technique was used for the weaving throughout. Draw out the design on paper the same size as the rug, pin this beneath the warp threads, or measure from the design for the length of the weft colors. Size of this rug 22"x46". This rug was woven by Marjorie McKay, and rug No.1 by Clara Stone. Both of these rugs were accepted and shown at the Annual Art Exhibit of Wayne University student work at the Detroit Art Institute June 2 - 16th of this year. The technique use for this rug was described in detail in Handweaving News for March of 1940. This is still available if anyone wishes to have it. Cost is 45¢ each. Many other designs are of course possible in this technique, and I hope this will be of interest to News subscribers.

Rug No.3 at the top of Page 1 was woven on the new two harness "Hearthside" loom which has just been put on the market by Sears & Roebuck Co. This loom is a two harness heddle loom and sells for \$10.98. It weaves about 26" wide and is sold warped and threaded with five yards of carpet warp. It is an excellent value for the money, and a strong, durable, portable loom. Make a warp of 268 threads. This fills 207 holes and slits of the heddle.

Two Harness Threading Draft for Rug No.3
on Page 1.



Explanation of the Threading Draft above. In the threading draft above there are two lines. One line H which represents the holes of the heddle, and one line S which represents the slits of the heddle. The 0's on the draft mean to omit or skip a hole or a slit of the heddle according to the line on which the 0 may be in the draft. The 2's mean two warp threads threaded into either a hole or a slit, according to the line on which they occur in the draft. Thread as follows, -

E to A on the draft is the border,	uses 10 threads	or	5 holes & slits
A to B " " "	" 42 "	"	33 " "
B to C " " "	" 160 "	"	126 " "
repeat from B to C, 4 times.	" 4 "	"	3 " "
D to C once,	" 42 "	"	33 " "
then starting at B, thread to A	" 10 "	"	5 " "
A to E, for end border.			
	<u>Total warp 268</u>		<u>207</u> " "

Materials needed. 2 tubes natural carpet warp. Weft 2 skeins of Maysville Rug Filler white and 2 skeins of Rose were used for the rug shown. Any other color combination desired may be used. Grey and Rust color, Tan and Brown, Light and Dark Blue etc. are other suggestions. But it is necessary to use two contrasting colors for this type of rug or the pattern will not show up much. The warp is almost entirely covered, and the weft beats up to make a thick heavy rug which will stay on the floor well.

Weaving the Rug. Weave a heading of carpet warp $\frac{1}{2}$ inch wide. No true plain weave is possible. Wind two shuttles, one with white rug filler and one with rose. Put through a shot of white rug filler, change heddle to change shed, and throw in a shot of rose rug filler. Fasten in the ends of the white and rose weft. Repeat this alternation until there are 4 shots of each color, changing the shed each time the weft is passed through the shed. This is the first pattern block. For the second pattern block, put in a shot of white weft in the same shed as the last shot of rose weft, without changing the heddle. To finish the second pattern block, put in a shot of rose, then white, rose, white, rose; changing the shed as usual each time the weft is put through. To begin the third block put a shot of white weft in the same shed as the last shot of rose of the second block, then alternate as before rose, white, rose, white, rose, changing the shed each time. We are now ready to begin the 4th block, and from here on it will be understood that the first shot of white for the next pattern block is always put through in the same shed as the last shot of rose on the preceding block. Also when weaving watch the alternation of the two colors at the edges of the warp, and try to keep as even edges as possible. Also take care not to pull in the weft threads. Let them lie loosely in the shed as they are put in, before beating them close.

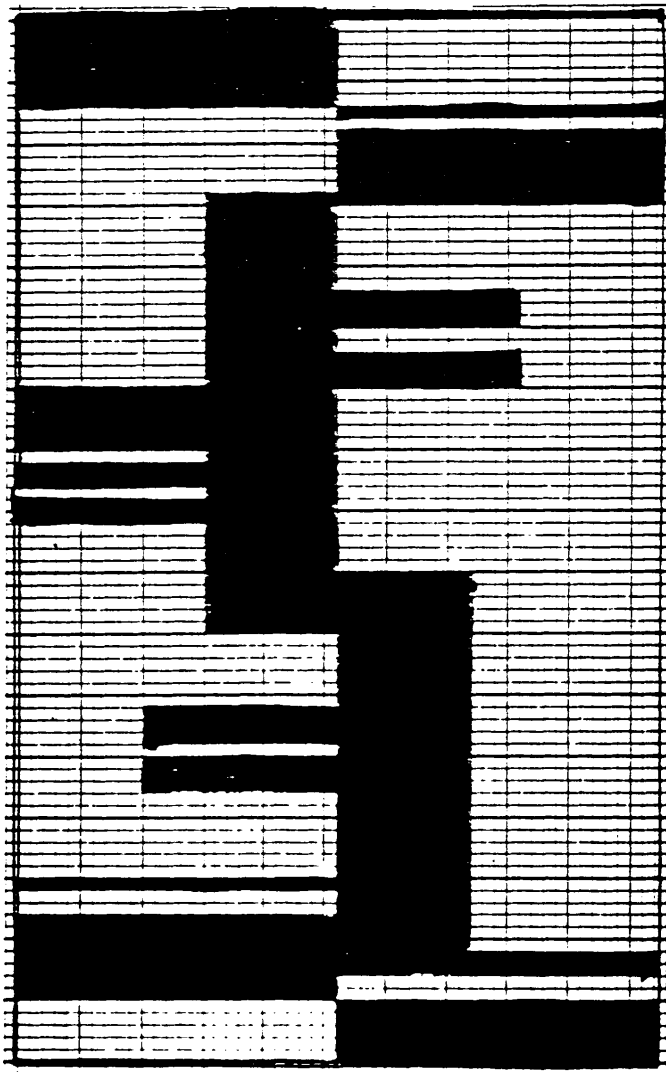
Weaving instructions for rug No. 3.

4th shed - 1 white, same shed as last shot of rose;) 1 rose; 1 white; 1 rose.
 5th " " " " " " " " " " ; 1 R; 1 W; 1 R; 1 W; 1 R.
 6th " " " " " " " " " " ; 1 R; 1 W; 1 R;
 7th " " " " " " " " " " ; 1 R; 1 W; 1 R; 1 W; 1 R.
 8th " " " " " " " " " " ; 1 R; 1 W; 1 R; 1 W; 1 R.
 9th " " " " " " " " " " ; 1R;1W;1R;1W;1R;1W;1R.

End the 9th shed with rose. Put the next shot of white in the same shed. Alternate white and rose for 50 inches for the center of the rug. Be sure and end this with white. And put the first shot of rose, for the border on the opposite end of the rug, in the same shed as the white weft. Finish by repeating the first border as given above. Then make the carpet warp heading as in the beginning. These rugs may be finished by tying a fringe or if desired enough of the carpet warp heading can be woven for a hem on each end of the rug, or they may be bound with rug binding. The finished width of the border of this rug is 7 inches about, and the total length of the rug about 35 inches. Other variations of this are possible. This rug was woven by Mrs. Ruth Iva.

Rug No. 4 is an interesting and unusual use for twill threading which I have never seen anyone else do, and as far as I know it was original with Mrs. Hill. It not only gave a most interesting weave, but also unusual use of color.

Design - Rug No. 4 (woven by Mrs. Helen Hill.)
 1 square equals 1 inch of weaving.)



Materials used. 8 skeins Maysville Rug Filler in dark green, - one skein weaves about 19 inches of rug, tabby weft was light grey carpet warp. Warp was 7 spools -300 yds each, of 1 brown, 1 gold, 1 beige, 1 cream, 2 light grey, and 1 slate grey. Warp and thread in same order, one thread in a heddle and one in each dent of a 15 dent reed. Use the regular twill threading, -1, 2, 3, and 4 for the width of the warp. There are a number of ways in which this can be woven, but only one will be given here. The design was planned so it could be seamed down the center and the seam show very little. It was woven in two strips on a 26 inch Structo loom, each strip 85 inches long. Weave a 1 1/2 inch heading with green weft for hem. Let us begin with the right half of the design at the lower corner. Weave 5 inches for the dark stripe as follows, - * 1 alone green, 13 grey tabby, 2 alone green, 24 grey tabby, 3 alone, 13 grey tabby, 4 alone, green; 24 grey tabby; repeat. Now weave the light stripe for 2 inches as follows, - 234 green, 13 grey tabby, 134 green, 24 grey, 124 green, 13 grey, 123 green, 24 grey. Now the dark on top for 2" again from * to * as in the beginning. Now we come to the broken stripe. Bring down levers 234. Through this shed put through a shot of green for 15 inches, bring the shuttle up out of the shed on top. Change the shed to lever 1 alone. Put the shuttle down into this shed and carry across the width for the dark stripe. Then put in a shot of 13 grey tabby. Now back with green on lever 2 alone as far as before, change shed to 134 for the light, then 24 grey, then 124, bring shuttle out, 3 alone for dark stripe, 13 grey, 4 alone green bring again, then 24 grey tabby. Do this for 31 first 2 inch wide stripe of light etc.

shuttle out of shed, 123 put shuttle in shed inches, then weave 15 inches the same as the

HANDWEAVING NEWS

Figure No.1

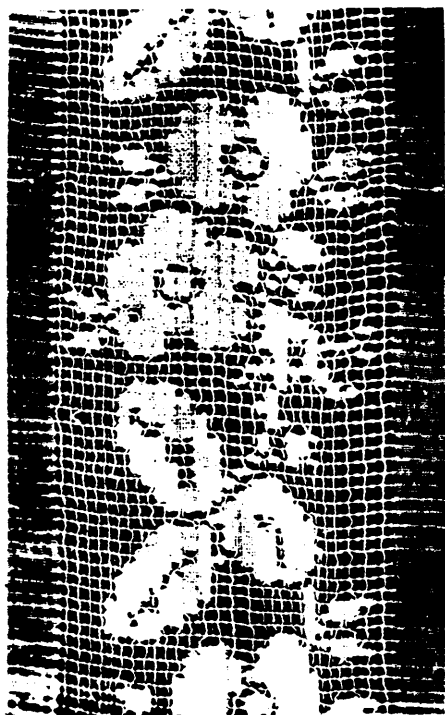


Figure No.2

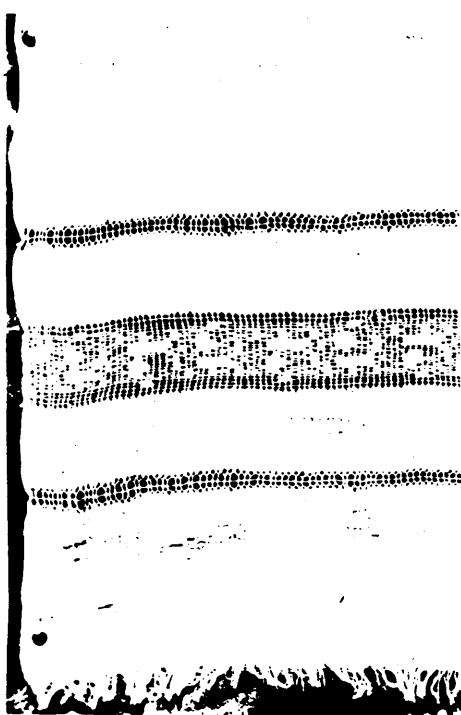
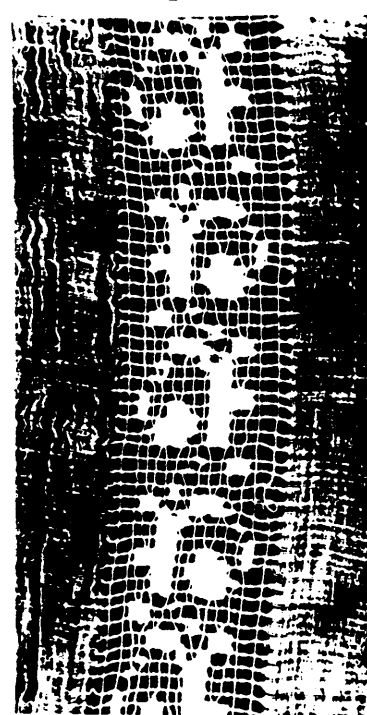


Figure No.3



A Form of Roumanian Gauze Weave.

Many interesting and unusual forms of free techniques have been first introduced to American handweavers through *Handweaving News*, and this month I am presenting a form of gauze weave which is different from anything else I have seen written up. I first discovered this weave on a very fine silk scarf which is used as a head dress by the Roumanian women, at an Exhibit of Roumanian textiles at the Naval Armory in 1934 during an exhibit of Women's work. The technique is really a form of woven lace worked out on the loom and based on the gauze weave. At Figure No.1 above is shown the detail of the first silk scarf that I saw at this time. Figure No.2 is another scarf of the same kind with a different border, and Figure No.4 is the sample which I wove in order to take off the technique at the time. I had a large loom set up to weave for exhibit and made this piece on it. I shall never forget the real excitement of the woman who owned the scarf when she saw my woven piece on the loom. She said, "None of the women of my country know how to do this now here in America, you are the only one in United States that can do it." And I am sure that was true at that time. Her scarf was over 100 years old, and woven by her great grandmother.

Technique of the Weave. This weave may be done on any loom which allows for plain weave, so a two harness loom is all that is necessary. It is composed of a simple gauze twist, with a heavy thread carried through the twist, and then the solid parts of the design are formed by weaving this heavy thread back and forth over the number of groups of threads as required by the pattern design, in a manner similar to that of spanish weave. This row is a combination of the gauze weave twist with the solid of the spanish weave. Then several rows of plain weave with very fine thread are put in all across the width of the loom, then another row of the twist and spanish weave combination according to the pattern design is put in, and so on for the width of the border.

In the original pieces at Figure No.1 and Figure No.2, this twist consists of eight warp threads, or four for the upper shed and four for the lower shed for each group, but these groups can be of 2, 4, 6, or even 10 threads if desired, though of course whatever number is chosen, it should be the same throughout the piece.

At Figure No.4 below is the modern piece which I wove on my loom at that time. It was woven on a No.20 mercerized cotton warp, set 24 threads to the inch, with the weft for the fine background weave the same as the warp, and the weft for the pattern gauze twist was of heavy linen Floss. No.5 cotton might be used instead of the linen if desired. An enlarged detail of this is shown at Figure No.5, almost in the actual size. While the design drawing used is shown at Figure No.6. Any design can be used, but it should be planned out for the piece to be woven in the same manner as No.6. And it is best to try a very simple figure for the first attempt. Each group of the twisted warp threads represents one square of the cross section paper design. The design below was used for a warp of 300 threads. Also in planning designs for this weave, do not have too many separate blocks, keep the figures rather solid.

Detail of the Weave. To begin, it is best not to twist the first and last group of threads. Start at the right side of the loom with the heavy pattern twist weft. Weave under four threads with the shed raised, change shed, weave back to edge under four, change shed, weave ahead under four warp threads, as in the spanish stitch weave. Be sure the edge warp thread of this shed is raised, or a thread that is up. We are now ready to do a warp twist all across the width of the warp up to the last group of eight warp threads. These are woven as the first group in a spanish stitch weave. With a black pick-up stick, with the shed raised, skip the second four warp threads, though these are really the first four which are twisted, reach down through the shed, and with the point of the pick-up stick bring up on top, the

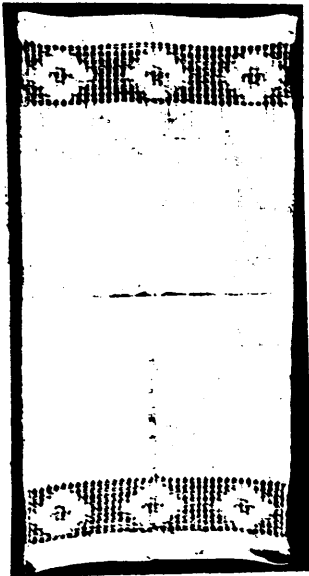
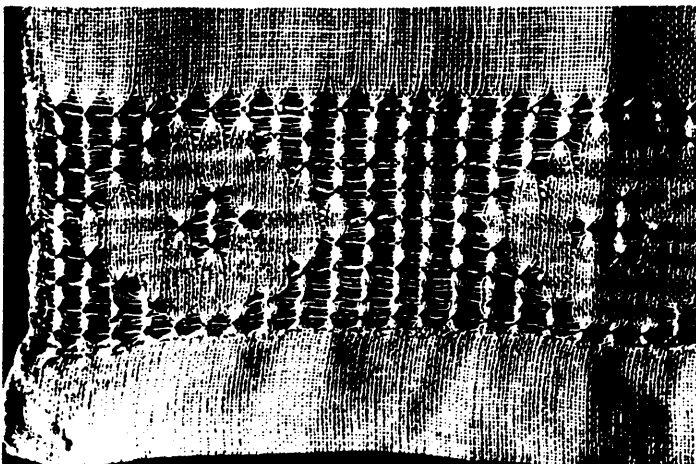
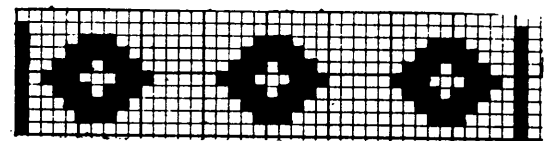


Figure No.5



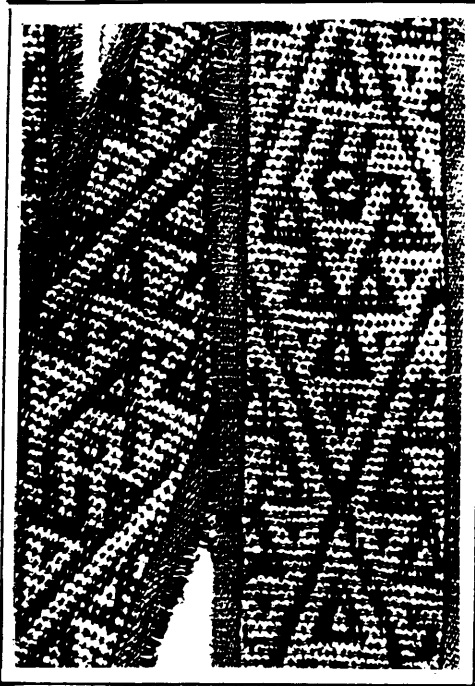
corresponding four threads in the lower shed; then push aside the next four threads on top and reach down again and pick up the next four threads, and so on for the width of the warp until the last group on the left side of the warp is reached. Do not twist this last group. Turn the pick up stick on edge and pass the weft through this twist shed which has been made by the pick up stick. Then weave the last group of eight warp threads with the spanish stitch as at the beginning. The fine weft can be passed through these same sheds with the heavy weft if desired. And if it is, there is no loop of fine weft on the warp edges. Now weave four shots of the fine weave all across the width of the loom, of course changing the shed each time. In the original pieces these fine threads are so very fine they scarcely show at all but they are there. This first row of twisted warp threads makes it possible to count the groups of pattern blocks which can be used for the design. Let each twisted group represent one square of cross section paper. Center the pattern design. Starting at the left edge, there are three twisted groups after the first edge group is woven solid. Pick up these on the black pick up stick, turn this on edge and pass the heavy weft through. Carry the heavy weft back and forth 5 times as in spanish stitch over the next three groups, then pick up 10 groups of twisted warp threads, and pass the heavy weft through, then work the heavy weft across the next three groups as for spanish stitch, then 10 more twisted warp groups, then through the next 3 groups with spanish stitch, then three twisted groups, and finish with the edge group solid. Then pass four shots of fine weft, changing the sheds each time. Then pick up the next row according to the design pattern. This is not difficult to do and is effective. Let me know how you like it.

Figure No.6



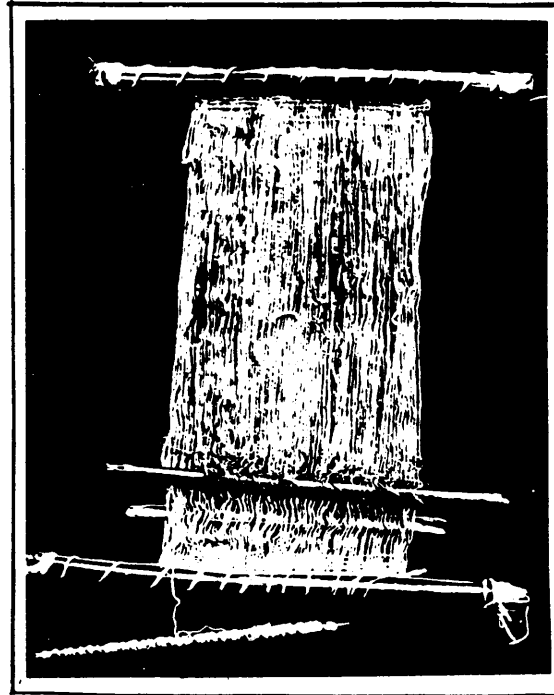
HANDWEAVING NEWS

Figure No.1



Ancient Incan Belt.

Figure No.2



Loom from the Mummy graves of Peru.

Ancient Peruvian Warp Pattern Textiles.

During this past summer I have been doing some intensive studying on some of the pieces in my collection of ancient Incan weavings which I brought back with me in 1939 when I went to Peru. The more one works with these textiles, the more they are amazed and thrilled with the remarkable accomplishments of this ancient civilization. I have over 300 of these fabrics, and was very privileged to have had an opportunity to select so many pieces which are not only exceedingly rare, but also very fascinating from the weavers point of view with regard to technique which was used.

There are many different types of warp patterned textiles. The one presented here is one of the simplest and easiest to work out, and one which I believe will have some interesting modern uses. I have eight different fabrics where this method of weaving was used. Figure No.1 above shows a belt strip, and the exact design of this strip is given on the next page so that it may be followed easily. Figure No.2 shows the simple form of loom which was in common use by the Incans, also from my own collection. With but few exceptions most of the ancient Peruvian weavings were woven on very narrow looms, and many of them are complete pieces with no cut in them anywhere. This loom is about 8" wide for the warp. Figure No.3 is a complete piece in the same technique as No.1. The belt was woven of dark brown and tan warp with a fine weft in a lighter shade of brown. This is about 3 inches wide and 35 inches long. The pattern is just the reverse on the wrong side as to color, but the texture is the same on each side. Figure No.3 is woven with tan, middle brown, dark brown and blue. These colors are alternated with white for the warp so that warp stripes of these different colors are formed. The weft of this piece is of white fine cotton, and scarcely shows at all. The pattern is also slightly different from No.1, it is of two interlocked bird figures, and the diagonal wave or serpent design. This designing is extremely clever, and difficult to take off of the fabric, because it is so free.

In the original Peruvian textile, the warp was of 2 fine white threads about the size of 20/2 cotton, and 2 dark brown threads the same size, alternate the white and dark brown for the width. In the sample which was worked out in this technique, the loom was set up with dark blue and white carpet warp sleyed 15 threads to the inch. Use twill threading, 1, 2, 3, & 4 for the width of the warp. Put white threads on harness 1 and 3, and dark threads on harnesses 2 & 4. Structo loom was used for the figures used. For a loom where the harnesses sink, use just the opposite figures.

Method of Working the Technique. For the plain diamond background use the order of bringing down the levers as follows, - 2 alone, throw shot of white carpet warp weft on each shed, 1&3, 4 alone, 1&3. Repeat for about an inch. This brings the white background on top. To bring the dark background on top, use 2&4, 1&3&4, 2&4, 1&2&3. This uses just the opposite harnesses as the first order given.

Designing for this weave. I have never seen before a design given which could be followed for this weave. This one is given, not so much for the idea of copying the ancient design, as for the purpose of showing how it is possible to plan out your own designs on cross section paper. The solid black squares represent the dark threads which are picked up on the pickup stick, and the crosses represent the dark threads which are skipped over by the pickup stick, but they do weave and show. Note that the design is entirely on the diagonal.

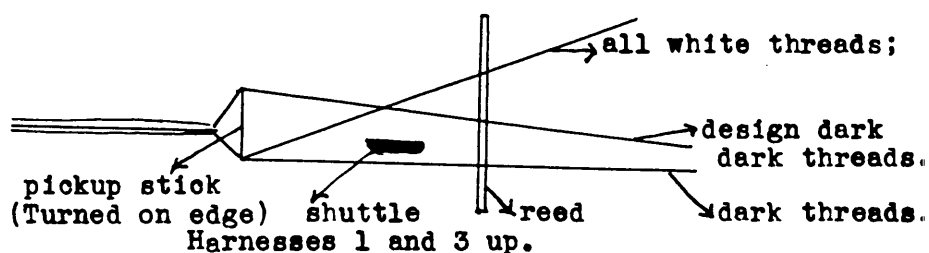
How to Pickup the Design Threads. Bring down lever 2 which raises harness 2, pass weft through this shed. Now with the pickup stick, pick up the one center thread which is a dark blue thread that is up. This is the square at the bottom of the design on Page 3. Bring down levers 1&3 to change shed, turn pickup stick on edge and pass weft through this shed, push previous row of weft down close with the shuttle. At Figure No. 4 is shown the side view of how the threads look as shuttle goes through. Now bring down lever 4 alone, turn pickup stick on edge, and pass weft through shed. With pickup stick still in, take a second pickup stick and pick up the second row of the pattern design, which are the two dark threads, one on each side of the thread on the first pickup stick. After the second pickup stick has picked up these threads, pull out the first stick. Change shed to 1&3, turn pickup stick on edge, pass weft through the shed, push weft down close with shuttle. Leave stick in, now bring down lever 2 alone, pass weft through shed. Take first pickup stick, and pick up the 3rd row of the pattern design. Skip 4 dark threads, pick up the next 7, skip over the next 2, and pick up the next three, skip over the next two, pick up the next 7, for this row. It is easier to leave the pickup stick in until the next row of pattern is picked up. Thus the order of bringing down the levers is 2 alone, 1&3, 4 alone, and 1&3. The pattern is picked up on lever 2 and 4 alternately with 1&3 between. At Figure No. 5 is shown the position of the threads, pickup stick and shuttle when either lever 2 or 4 is up. Also note that you always throw a shot of weft after changing the shed, before picking up the next row of pattern design with the pickup stick.



Figure No. 3

Figure No. 4

Sketch showing position of warp threads side view.



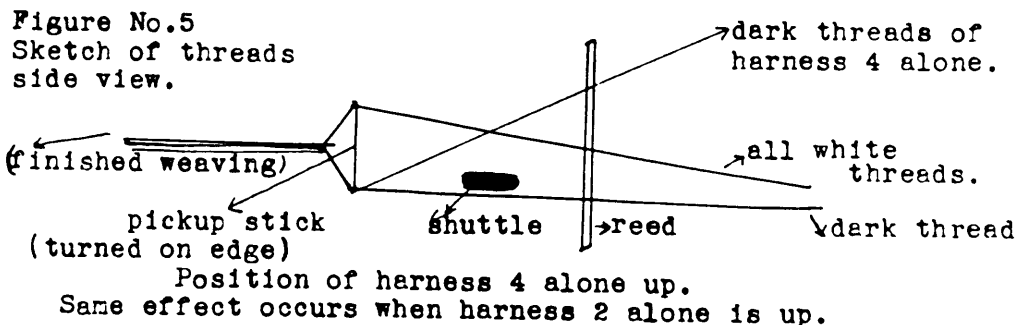
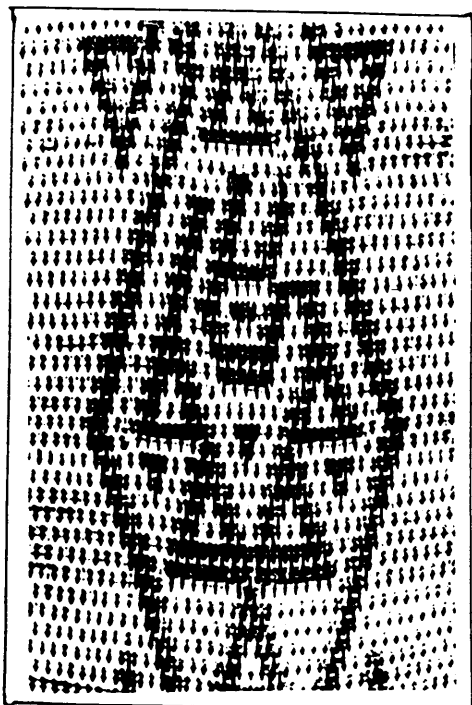


Figure No.6

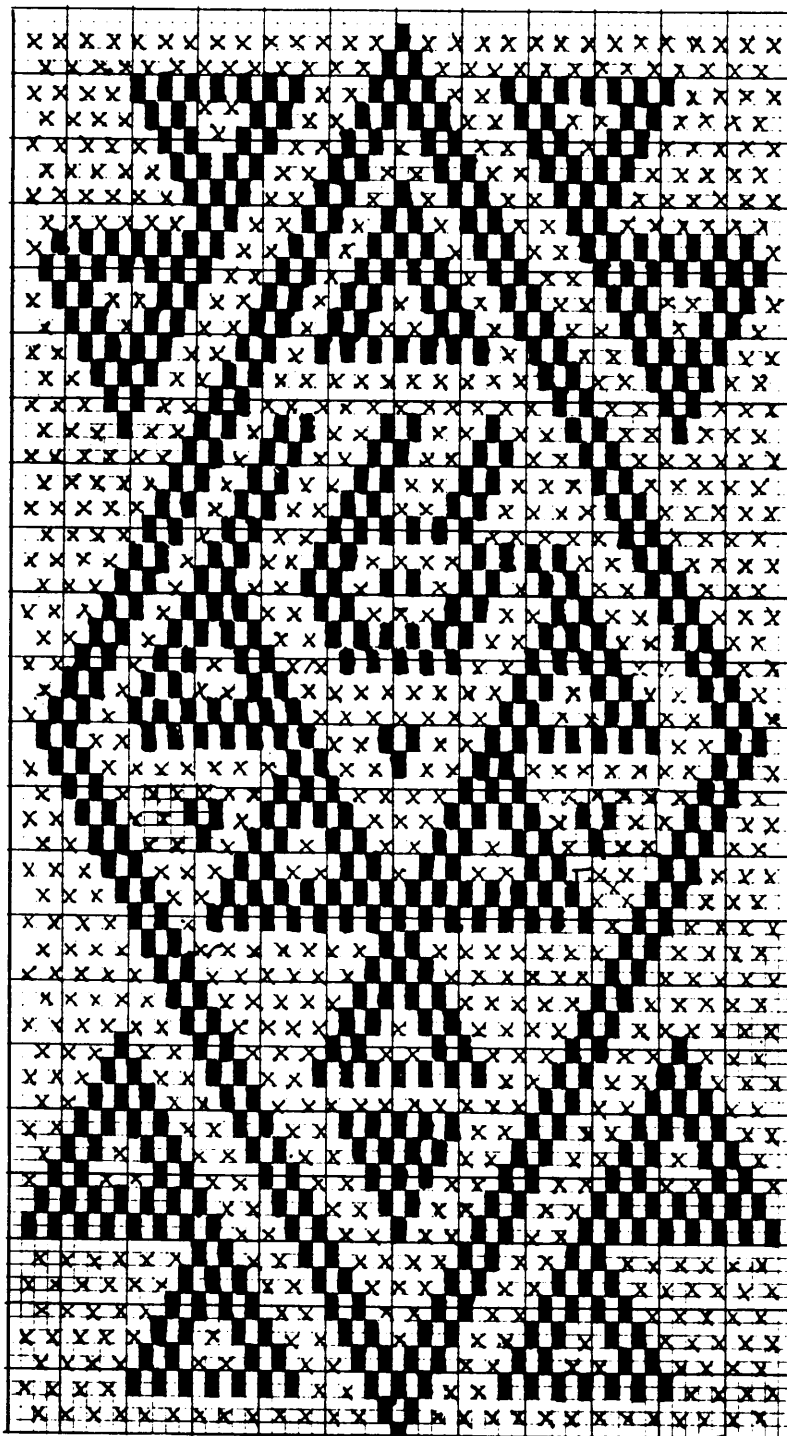


Detail of pattern design at Figure No.7

I hope News subscribers will enjoy using the information to be found in this month's leaflet. There are many uses for this technique, and if it is of sufficient interest, I will give further notes on ways to use it.

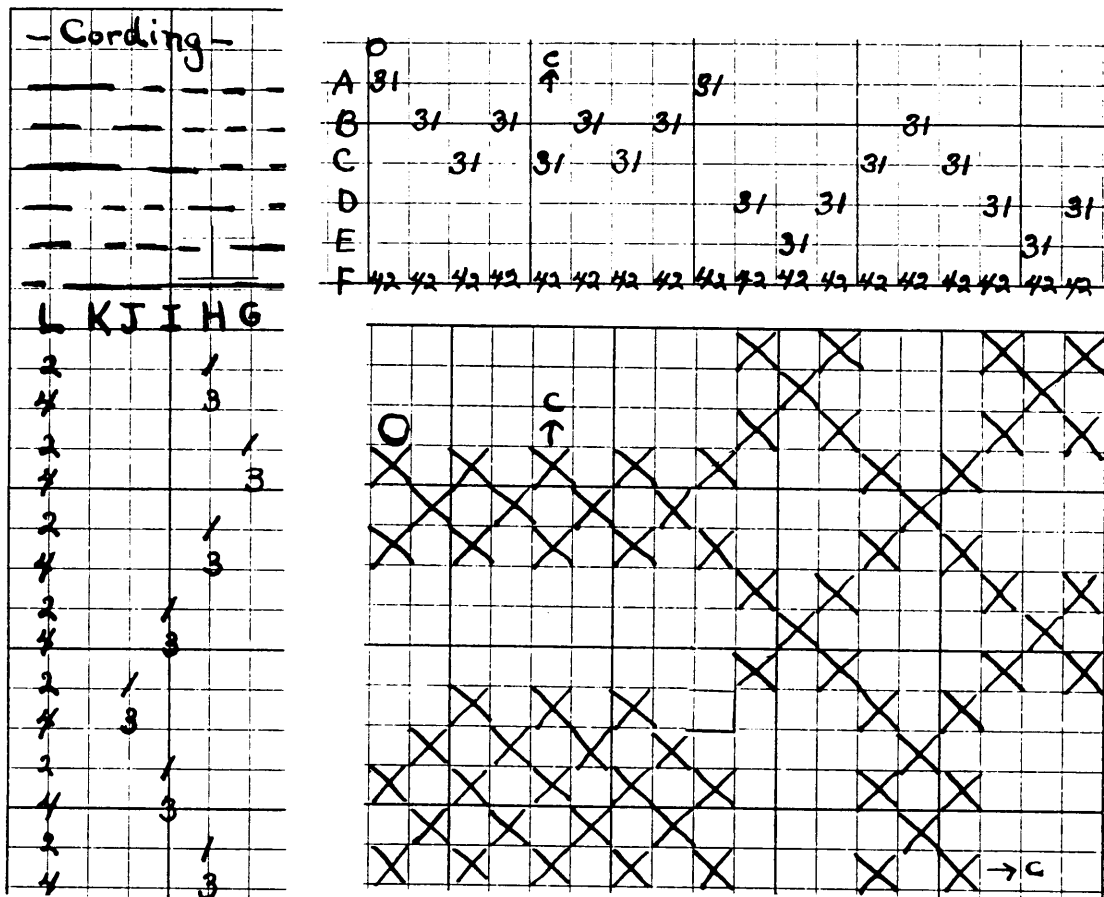
A number of requests have come to me for some designs for double weaving on a 4 harness loom. May I hear from those of you who have done this kind of weaving, and the kind of information which would be most helpful and of interest to you. I have in my collection from Peru, some very handsome pieces in this technique, and several different forms of this same kind of work.

Figure No.7 Pattern Design of Ancient Belt at Figure No.1.



HANDWEAVING NEWS

Pattern No.25 "Rose and Compass" Diaper from Bronson Book.



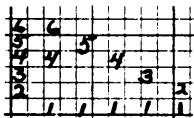
Some Old "Bronson" Weaves.

The drawing above is pattern No.25 "Rose and Compass" Diaper from the old weaving book called "Domestic Manufacturer's Assistant and Family Directory in the Arts of Weaving and Dyeing," by J.&R. Bronson, Utica, N.Y. 1817. This old book is to be found in the library of the Pennsylvania Museum in Philadelphia. It has directions for dyeing wool and other types of drafts as well as the one shown above.

Explanation of the nomenclature of the book. In this book the harnesses of the loom are called "wings". These are shown above at A, B, C, D, E and F, or 6 harnesses, A is the back harness on the loom. The 31 on line D and the 42 on line F, represent one thread on harness D, the next on harness F, the next on harness D, the next on F, and so on throughout the threading draft. C marks the center of the pattern, and the 0 the end of one repeat. The old book says, "The draft represents the figure as being drawn once over. There is on it 18 changes, 4 figures or threads to a change, as 1, 2, 3, 4. The 4 figures or threads, when drawn, make one block, and 18 blocks from the right, which extend only to 0 on the plate, is all of the draft the harness represents." The tie-up as we know it is called the "cording" in this old book and there are two sets of lamms, the long and the short set. In the figure above the letters L, K, J, I, H, G, represent the treadles of the loom, and the figures below represent the order in which these treadles are used. Thus from the old book, "The first tread is on treadle H, figure 1, next on L, figure 2, next H, L, G, L, G, L, and so on until the tread is through as directed, being in the whole 72 treads. While you are weaving the left foot is always on the left hand treadle L which makes the plain part of the cloth, while the rest forms the flower." Only a small part of this treading order is shown above.

Structure of the Weave. Note that this pattern consists of two figures of alternating blocks, which is one method of writing these drafts. Half of the warp threads are on one harness, and the rest of the threads are on the pattern harnesses. This treadle L on the tie-up draft is the treadle which makes the plain weave between the pattern shots. And one tabby will be tied to harness F alone, and the other tabby or A tabby, as we know it, will be tied B, C, D, E, F. Although in the old draft only one tabby was used with two shots of the pattern. The weave is made up of small pattern blocks, and can be written with 2, 4, or 6 threads for one pattern block unit as desired. The ancient draft on Page 1 has 4 threads for each pattern unit. This weave has a weft skip on one side and a warp skip on the other side. There are no half tone areas as in over-shot weave, and this is especially suited for fine linens, dress materials, or anything where fine close weave is desired. And it can be woven with just one shuttle.

Tie-up



The tie-up at the left is the same as the cording on Page 1, but is written for modern use. 1 is F, 2 is E, 3 is D, 4 is C, 5 is B, 6 is A. It is easier when weaving, if the weft skip is on the top side of the fabric. If your loom brings the weft skip on the wrong side, tie up the spaces of this tie-up draft.

Threading draft for 4 harness -3 block "Bronson" Weave.

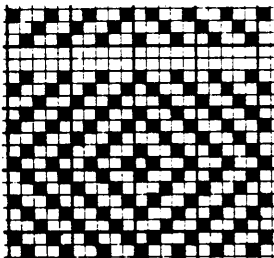
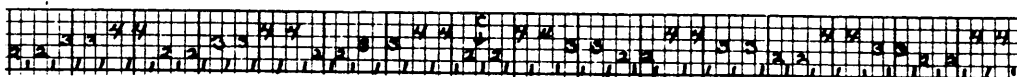


Figure No.2

This pattern which is one taken from an old linen sample which I have is very simple. It makes an interesting all over design excellent for linens. To weave use 1&2-2x with B tabby between; 1&3-2x, B tabby; 1&4-2x, B tabby; repeat 3 times, then 1&2-2x, B tabby between; reverse back to the beginning, then 1&4-2x, B tabby; now repeat over and over from beginning as before for length desired. Only part of the over effect is shown in the drawing on the left at Figure No.2. It will be noted that the key draft above figure No.2 is a three block pattern. Any key draft can be planned out in this way, and the threading draft written out as this one is. Those of you who have written three block patterns may find this of interest to do. Most of the old patterns are written for more than four harnesses, many of them for five and six harnesses. One repeat of the above pattern is 80 threads.

Threading Draft for 5 harness - 4 block pattern Bronson Weave. One repeat 152 threads

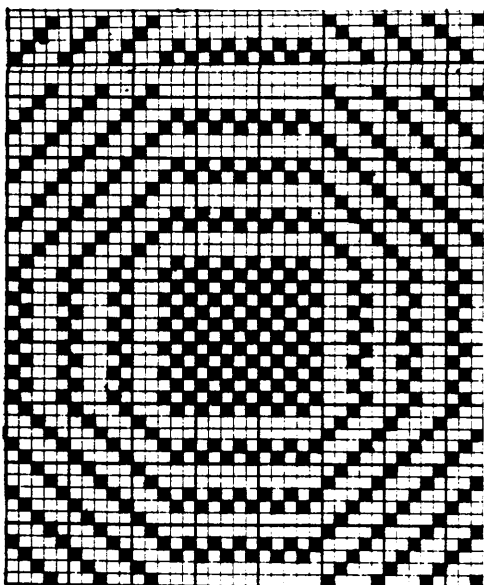
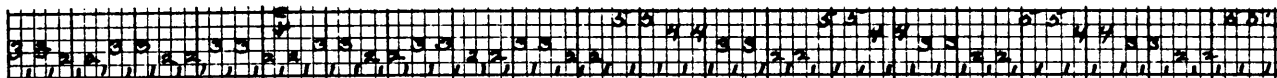


Figure No.3

This pattern is made up of twills with a figure on alternating pattern blocks. The pattern blocks are 1&2, 1&3, 1&4, and 1&5. The loom is tied to weave each of these pattern blocks. One tabby is 1 alone, and the other is 2, 3, 4, 5. Alternate tabby was not used on the old pieces I have, but only one tabby after each pattern shot. The pattern blocks can however be woven square as in over-shot if desired, and both A and B tabby may be used, alternating these after each time the pattern weft goes through the shed.

To weave this pattern, use B tabby between pattern shots, all through. Then 1&5-2x; * 1&2-2x, 1&3-2x; 1&4-2x; 1&5-2x; * repeat from * to * 3x. Now use 1&2-2x, 1&3-2x, repeat 6x. Then 1&2-2x, which makes the alternating blocks. Beginning with 1&5-2x, 1&4-2x, 1&3-2x, 1&2-2x, repeat this 3 times for the full repeat of the pattern, then start over again at the beginning. The warp for these weaves should be of fine material, such as 20/2 mercerized cotton woven with the same or fine rayon. For all linen use 40/2 linen for warp and for weft, set at 30 threads to 1".

Threading Draft for 5 harness Bronson Weave - 4 block Pattern
One Repeat- 152 threads.

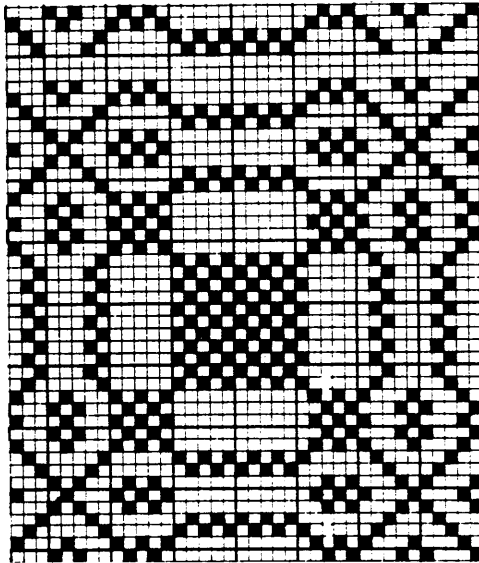
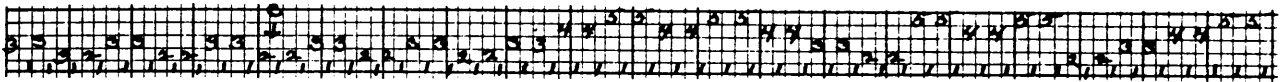


Figure No.4

This is another draft of one of the old samples of Bronson weave which I have, and a very interesting one also. It is woven the same as the ones given on the previous pages. Follow the order of the pattern blocks as given on the threading draft. Weave 2 shots on each pattern block, with plain weave between.

The tie-up is 1&5, 1&4, 1&3, 1&2. One tabby is 1 alone and the other is 2, 3, 4, 5.

For linens set the warp threads 30 threads to the inch. This is a very good pattern for towels or for a large cloth. Weave with linen as fine or even finer than the warp.

Threading Draft for 6 harness Bronson Weave - 5 block Pattern

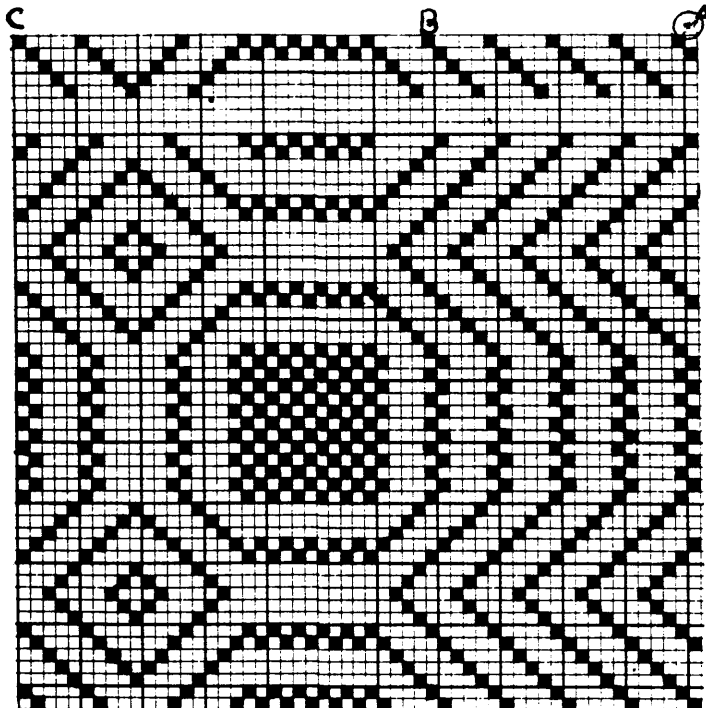
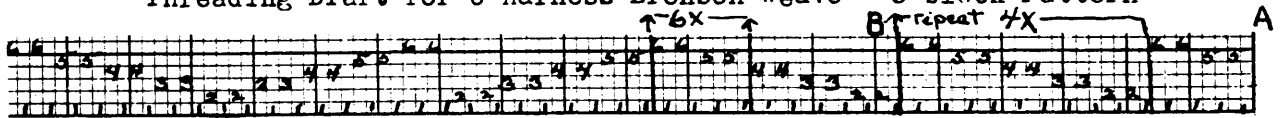
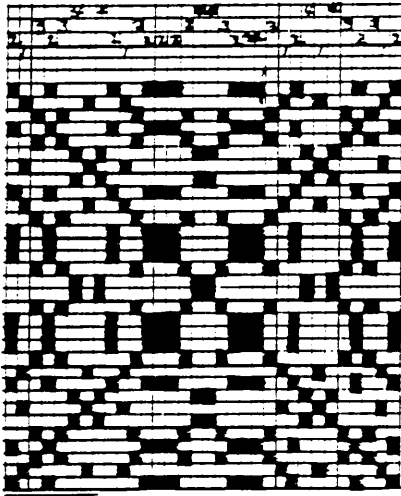


Figure No.5

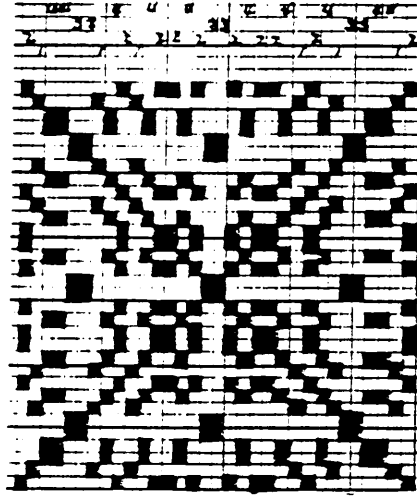
This pattern is written with a twill border. It was taken from a piece of an old table cloth. From A to C on the threading draft is one-half of the repeat; C being the center of the repeat. This piece was woven with a very fine warp, and the weft thread was somewhat coarser, with only one shot of the pattern on each pattern block with a shot of plain weave between. The tie-up is 1&6, 1&5, 1&4, 1&3, 1&2, 1 alone for one tabby, and 2, 3, 4, 5, 6, for the other tabby.

These pattern drafts were sent out in answer to a request for some old drafts of Bronson weaves. We are making some modern variations of this technique which some of you may find interesting, and if you wish to have some of these, write me and they will be written up in the News.

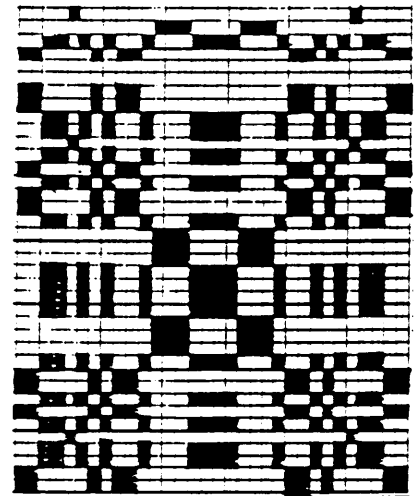
HANDWEAVING NEWS



Code III.



Code II.



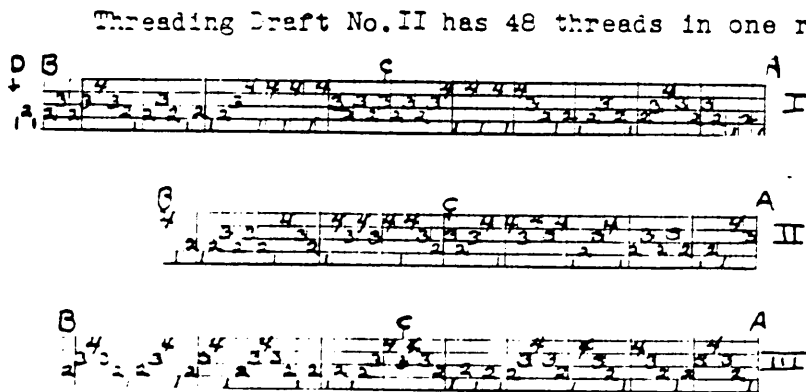
Code I.

More Name Drafts Designed from Codes.

Last January the News gave directions for using a code to design patterns for four harness weaving. The above designs were made from the three codes given on the name "Felix Mendelssohn". Copies of this News are still available for those of you who are new subscribers if you desire it.

The pattern threadings given below have been arranged for a warp of 240 threads. Note that it is not possible to get exactly the same effect as in the pattern effect drawings, in the weaving. Check drafts below the threading drafts will show what will weave, and the effect which will come up. And in writing these threadings some differences have been made from the key drafts as will also be seen.

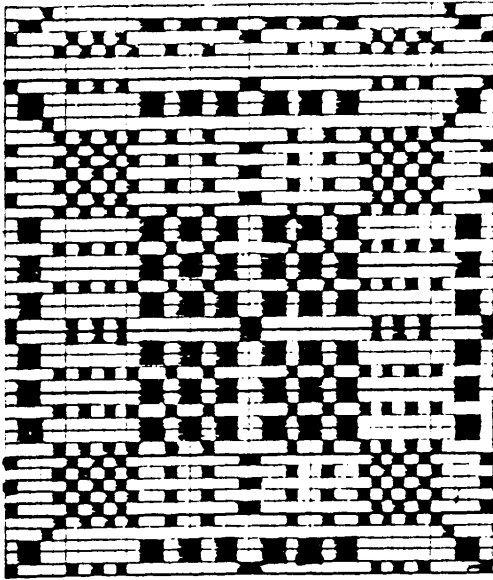
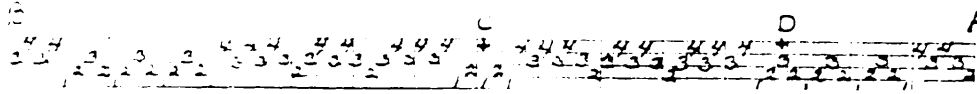
To arrange threading draft No. I which has a repeat of 58 threads from A to B, proceed as follows, - Thread the first three heddles double, then repeat A to B four times, then thread from B to D once, putting 2 threads in the last two heddles. C marks the center of the threading draft. To weave this with the levers of the Structo loom proceed as follows, 34-3x, 14-3x, 12-2x, 14-1, 34-1, 14-1, 34-4x, 12-1, 23-6x, 14-8x; center, repeat back in reverse to beginning. Use plain weave 1&3 and 2&4 alternately after each pattern shot as usual.



Draft No. III has 56 threads from A to B. Thread 1, 2, 3, 4, twice. Then repeat A to B 4 times. At end thread 1, 4, 3, 2, 1, 4, 3, 2.

January 1943

Nellie Sargent Johnson 12489 Mendota Ave. Detroit.

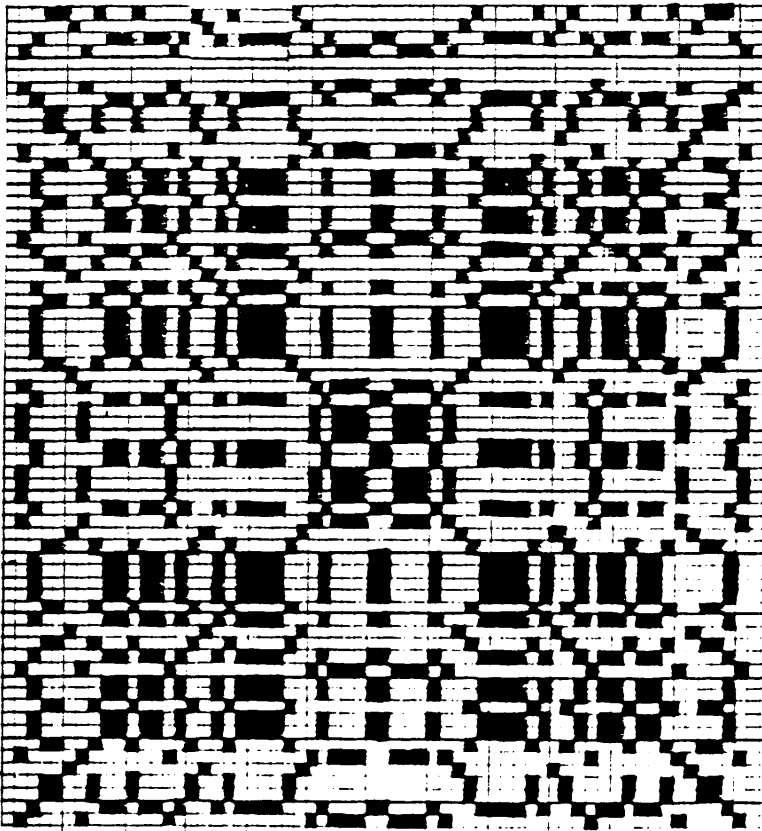
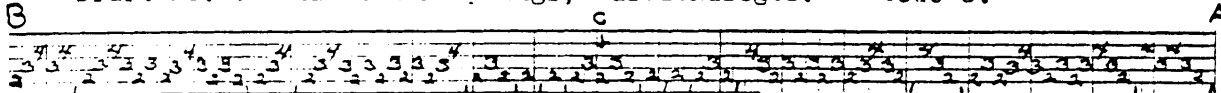


The two drafts on this page are based on the names of towns. This is fun to do too. Choose long names and include the state for a large draft. Draft No. IV A to B is a repeat of 78 threads. To arrange for a warp of 420 threads, begin to thread at D. Thread from D to A, but end on the second thread which is on harness 3. Then A to B 5 times. Then A to D at end of draft.

To weave on the levers of the Structo loom, proceed as follows, - 14-1, 12-3x, 23-1*, 34-3x, 14-2x*, repeat 4 times. Then 12-5x, 14-2x; repeat this 3x. Then 34-4x, center, repeat back to beginning in reverse order to complete the pattern. Use plain weave tabby after each shot of the pattern. This is 1&3 and 2&4.

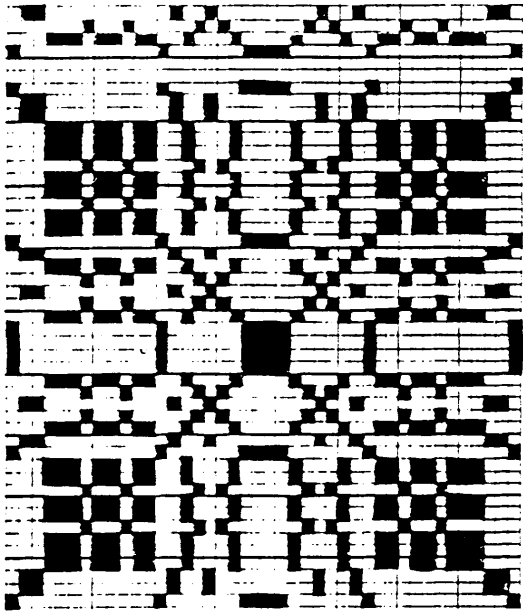
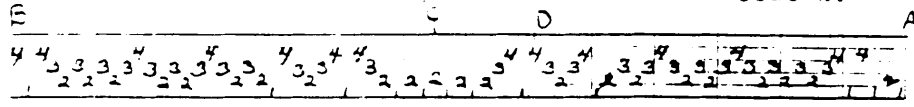
There are many other ways of weaving these drafts than that given, and there are also a number of other ways to write the threading drafts. Considerable liberty can be taken if desired, and they need not conform too strictly to the pattern effect drawing.

Draft No. V. Winchendon Springs, Massachusetts. Code 3.



Draft No. V is arranged for a warp of 600 threads as follows, Thread 1, 2, 3, 4, and put 2 threads in the first heddle. Then A to B repeated 6 times. At end thread 1, 4, 3, 2, 1 putting 2 threads in the last heddle.

To weave proceed as follows, - 34-1, 14-1, 12-3x, 23-1, 34-1, 12-1, 14-4x, 12-1, 14-4x. 34-1, 14-1, 12-1, 23-1, 14-1, 14-8x, 12-1, 23-1, 34-1, 14-1, 34-6x, 14-4x; center, repeat back in reverse order to the beginning for a complete repeat.

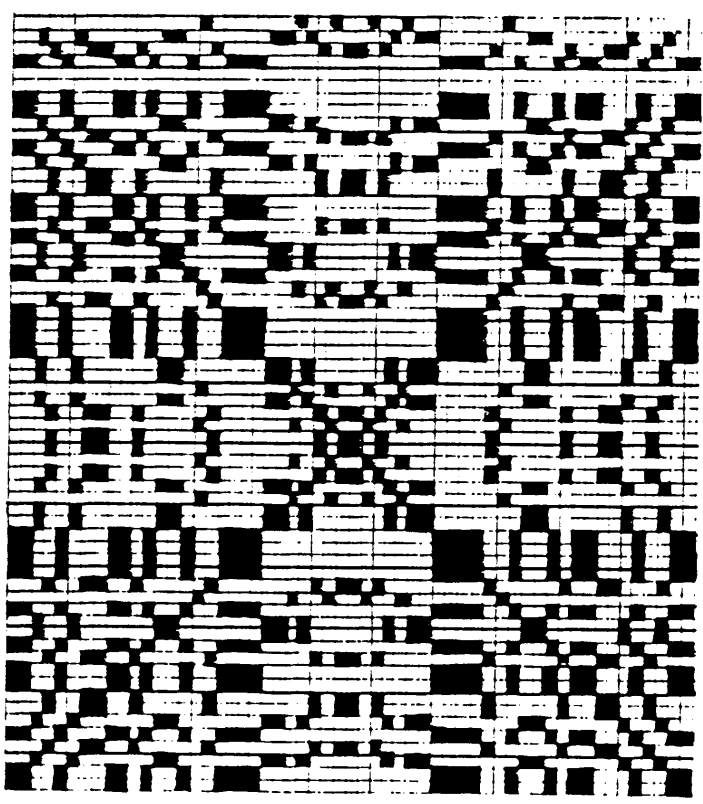
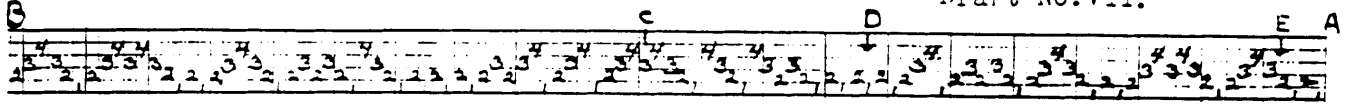


Draft No. 6 has a repeat of 72 threads from A to B. To arrange this for a warp of 420 threads, begin to thread at D. Put 2 threads in the first heddle, go toward A for 28 threads. Repeat A to B 5 times, then A to D once. Thread the last heddle double.

To weave this on the Structo loom, - 12-1, 14-2x, 12-1, 23-1, 34-1, 14-3x, 12-2x, 14-4x, 12-2x, 14-6x, 23-3x, 34-2x; center-repeat in reverse back to the beginning. For the complete repeat, continue 23-2x, 12-1, 14-1, 34-7x; center repeat back in reverse to the very beginning.

The two threading drafts on this page are both name drafts.

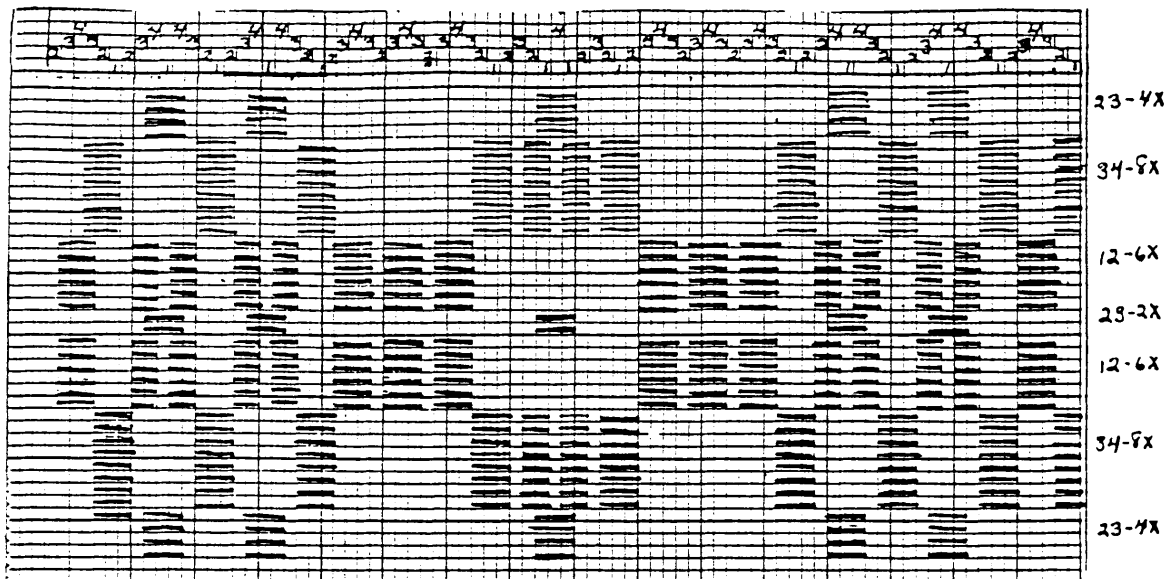
Draft NO. VII.



Draft No. VII. has 106 warp threads in one repeat from A to B. To arrange this for 600 warp threads, thread as follows, - Begin to thread at D to E equals 33 threads. Then A to B, 5 times equals 530 threads, then A to D is 37 more threads for a total of 600.

To weave on the Structo loom, use levers 34-8x, 14-1, 23-1, 34-1, 14-3x, 34-1, 12-1, 34-3x, 12-3x, 14-1, 34-1, 12-1, 14-1, 34-3x; repeat back to the beginning. Then continue *14-3x, 23-1, 14-1, 12-1, 23-1, 12-4x; center, repeat back to *. Then begin at the beginning again.

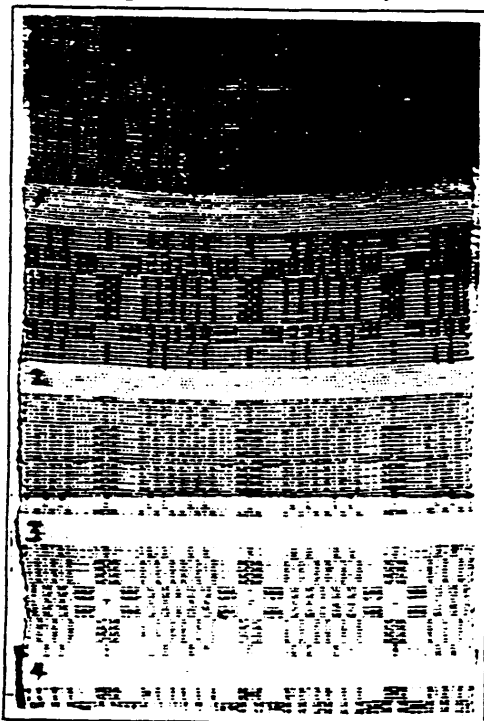
HANDWEAVING NEWS



Some Crackle Weave Patterns

Several subscribers have asked me lately for some new patterns in Crackle weave. Here they are and I hope you will like them. I have three issues of the News still available which contain other drafts if you wish them, - Feb 1940 "Designing Crackle Weave"; November 1940, "Crackle Weave Trees from an Ancient

Pattern Book"; and May 1941, "More Crackle Weave Patterns. A correspondent in Vancouver B.C. writes me that she won a first prize on a luncheon set she wove on the design at Fig. No.2 of May 1941, at the Canadian Pacific Coast Exhibition last fall. Copies of the above are available at 45¢ each if you wish any of them.



The pattern given above is a simple border which will have many uses. It is nice for towel borders, luncheon sets etc. One repeat of the pattern draft is given, and the photo at the left shows four border designs. The 4th one is the border drawn down in the check draft above just below the threading draft.

Border No.1 (Figures refer to levers of the Structo loom, transpose just the opposite for a treadle loom), - 12-6x, 34-16x, 14-4x, 23-10x, 14-4x, 34-16x; repeat as desired.
 Border No.2-23-6x, 12-5x, 34-12x, 12-5x; repeat.
 Border No.3-34-2x, 23-6x, 34-8x, 14-2x, 34-8x, 23-6x.
 Border No.4-23-4x, 34-8x, 12-6x, 23-2x, 12-6x, 34-8x and 23-4x. Another border No.5, is 34-4x, 14-8x, 12-12x, 23-4x, 12-12x, 14-8x, and 34-4x. There are many other ways of weaving this pattern. The regular four harness loom tie-up is used.

April 1943

Nellie Sargent Johnson 12489 Mendota Ave. Detroit.

Methods of Weaving Crackle Weave Drafts.

There are a number of ways in which these crackle weave drafts can be woven to give entirely different effects.

Method No.1 is to weave as in regular over-shot patterns,- one shot of the pattern weave weft, a shot of plain weave or tabby, another shot of the pattern weave weft, and then the alternate shot of plain weave. Of course color can be used as desired, the pattern weft of one color and the plain weave of another color or like the warp.

Method No.2. Alternate pattern shots on two pattern blocks can be used as the "one and one" method of weaving "summer and winter" weave, and put alternate plain weave shots between each pattern shot. This does not give as much of a pronounced pattern figure as method No.1, but does make a good variation for some things.

- To Weave Block 1 - Treadle 1, or (3&4 levers of Structo loom,) one pattern plain weave shot. shot.
Treadle 2, or 1&4 levers, one pattern shot.
plain weave shot. Repeat as desired.
- To weave Block 2- Treadle 3, or levers 1&2, once; shot of plain weave, then
Treadle 2, or levers 1&4, once; shot of plain weave, repeat.
- To Weave Block 3- Treadle 4, or levers 2&3, once; shot of plain weave.
Treadle 3, or levers 1&2, once; shot of plain weave, repeat.
- To Weave Block 4- Treadle 4, or levers 2&3, once; shot of plain weave, then
Treadle 1, or levers 3&4, once; shot of plain weave; repeat.

Method No.3 Weaving without a tabby or plain weave, using three colors. This will give some very unusual and interesting modern effects if colors are carefully chosen. If you have never tried this, do so. You will find it well worth your while.

- To weave Block 1- Treadle 1- (levers 3&4), one pattern shot with Color (1)
" 2- " 1&4, " " " Color (2)
" 1- " 3&4, " " " Color (1)
" 4- " 2&3, " " " Color (3)
Repeat as desired, but end with Treadle 1, Color (1).
- To weave Block 2- Treadle 2- (levers 1&4), one pattern shot Color (1)
" 3- " 1&2, " " " (2)
" 2- " 1&4, " " " (1)
" 1- " 3&4, " " " (3)
Repeat as desired, but end with Treadle 2 Color (1).
- To weave Block 3- Treadle 3- (levers 1&2), one pattern shot Color (1).
" 4- " 2&3, " " " (2).
" 3- " 1&2, " " " (1).
" 2- " 1&4, " " " (3)
Repeat as desired, but end the block with treadle 3, Color (1).
- To Weave Block 4- Treadle 4- (levers 2&3), one pattern shot Color (1)
" 1- " 3&4, " " " (2)
" 4- " 2&3, " " " (1)
" 3- " 1&2, " " " (3)
Repeat as desired, but end the block with treadle 4, Color (1).

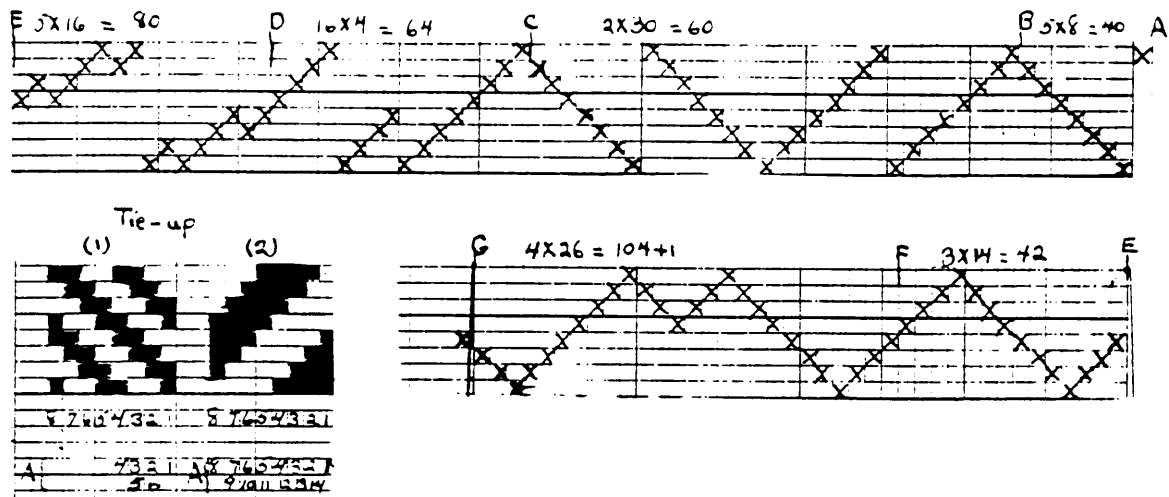
Method No.4. Weaving "on opposites". The opposites on the loom are 1&2, and 3&4; or 2&3 and 1&4. Using two colors and weaving on either pair of opposite sheds will produce a regular 2 block pattern. No plain weave need be used unless desired. Four colors can be used for this, one for each of the four sheds.

Method No.4. Weave one shot on each pattern shed in continuous order of 1&2, 2&3, 3&4, and 4&1. No plain weave need to be used with this either, if the order is kept. Several colors also can be used if desired.

Method No.5 Four different sets of stripes can be woven by the repetition of any one of the four pattern sheds as desired.

HANDWEAVING NEWS

Figure No.1 Threading Draft for Twill Sampler



An Experimental Sampler using 8 harness Twills.

It has been some time since I have given any material on eight harnesses in the News. This experimental sampler which I shall describe was woven by Helen Hill one of my students. And if you wish to discover some truly amazing and unusual effects, try one of these experiments yourself. The result will give you many new ideas for bags, draperies, upholstery materials etc. in great variety.

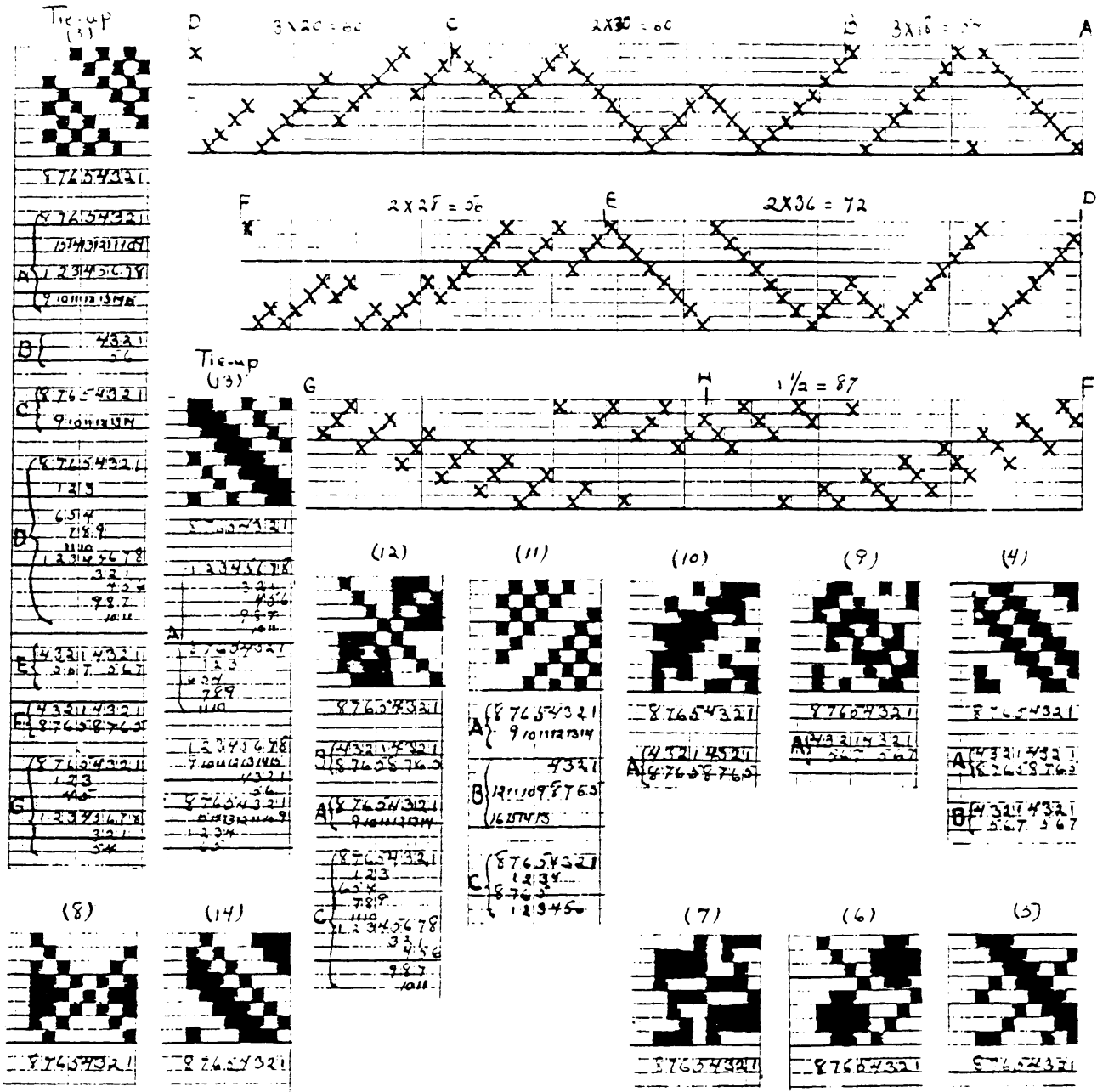
Materials used, - The warp used for this sampler was beige 20/2 cotton. It was sleyed two threads in each dent of an 18 dent reed. Weft was No.10 mercerized cotton in a cream white. It would be possible to use many other colors of weft as well as many different kinds and sizes of weft to get still more effects. This would be an excellent way to use up odds and ends of different kinds of threads.

The Threading Draft above is a combination of 6 different variations of twill, and is planned for a warp of 780 threads. It is threaded from the beginning up to the center at G and then in reverse back to the beginning. If one did not wish to make the pattern drafts balance in the center, the six more threadings on the next page could be used, and give 12 different threadings for the same width on the loom. And by using the tie-ups as given one would have still more variety. I have never seen anyone else use just this idea. It is not only very much of a short cut, but is truly exciting and very much worth while. Our sampler was about a yard and a quarter long and had about 176 different weaves. If you use the 12 threadings this is greatly increased. From A to B of the draft above is just straight twill repeated 5 x to equal 40 warp threads. Note the threading begins on the 8th harness. From B to C is twill reversed, repeated twice to equal 60 threads. From C to D, the 3rd threading, are the twill repeated 4x. On this threading many two block patterns may be woven in double weave, damask etc. The News for July 1940 explains this and gives 8 variations of this technique, in addition to that given here. Copies of this available at 45¢ ea. D to E or the 4th threading above is a similar threading with the pattern blocks made larger. Repeated 5x this equals 80 warp threads. E to F the 5th threading is one reversed twill on the first four harnesses and one on the second four harnesses, repeated 3x to equal 42 warp threads. From F to G the 6th and center threading is a double reverse twill similar to E to F. The single thread just beyond G is the center, repeat back to the beginning A in same order for the complete repeat. Of course any of these threadings may be used alone, for a full repeat across the width of the loom if desired.

May 1943

Nellie Sargent Johnson

12489 Mendota Ave. Detroit, Mich.



Explanation of the Tie-up Draft. The different tie-up drafts are numbered from No.1 on Page 1 through No.14 on this page. The black squares indicate the levers of the Structo loom, or the ties to use for a jack loom, or a "rising" shed loom. For other looms tie the spaces on these drafts. For instance at Tie-up No.3 above, the figures below the draft 1,2,3,4,5,6,7,8, indicate the treadles, treadle 1 being at the right. Read in order from right to left. And treadle 1, or the levers of the Structo loom, are 3,5,&7; treadle 2 is 4,6,8; treadle 3 is 1,5,7; treadle 4 is 2,6,8 and so on. The groups under the tie-up as at A,B,C,D,E,F and G indicate different orders of using the treadles, according to the line in which they occur. I hope this is clear. One shot of weft only is used on each pattern shed.

The six threading drafts arranged above at Figure No.2 may be used with the ones on Page 1. if desired, and are arranged to use 390 warp threads also. From A to B is 18 threads x 3 is 54; B to C is 30 x 2 is 60 threads; C to D is 20 x 3 is 60 threads; D to E is 36 x 2 is 72 threads; and E to F is 28 x 2 is 56 threads; now F to G once then F to H the center is 87 threads. This is exactly one half of the threading. This News contains a great deal of material which I hope will be useful to many.

HANDWEAVING NEWS

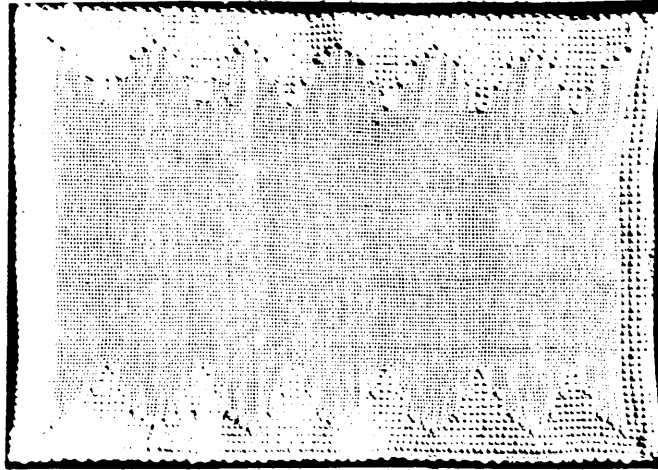
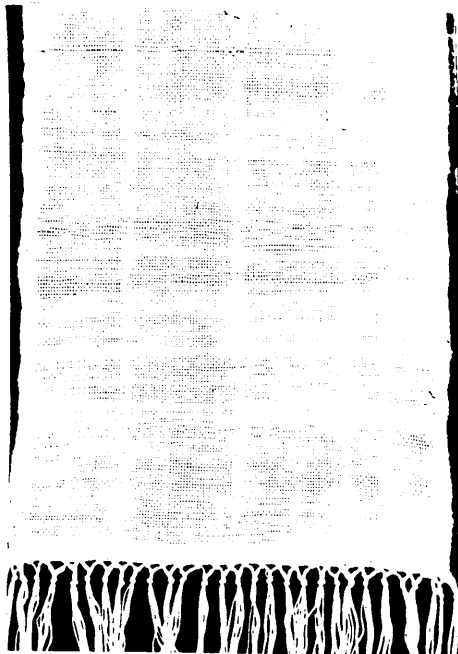


Figure No.1

"Laid-In" Weaving for the Hearthside Loom.

The pieces described this month were woven on the Hearthside Loom. And all were woven on Maysville Carpet Warp for the warp, with the same for the plain weave between each row of the laid-in pattern thread, which was of Maysville Home-craft Soft Spun Cotton. Many very surprising effects can be gained with these simple inexpensive materials. The curtains on Page 2 were entered in a recent

Figure No.2



competition put on by the Modern Museum of Art, "The Arts in Therapy" and was accepted to become a part of their Exhibits which are touring the country, and to become the property of the Museum. While these curtains are decidedly modern in their effect, they will fit nicely into any type of room.

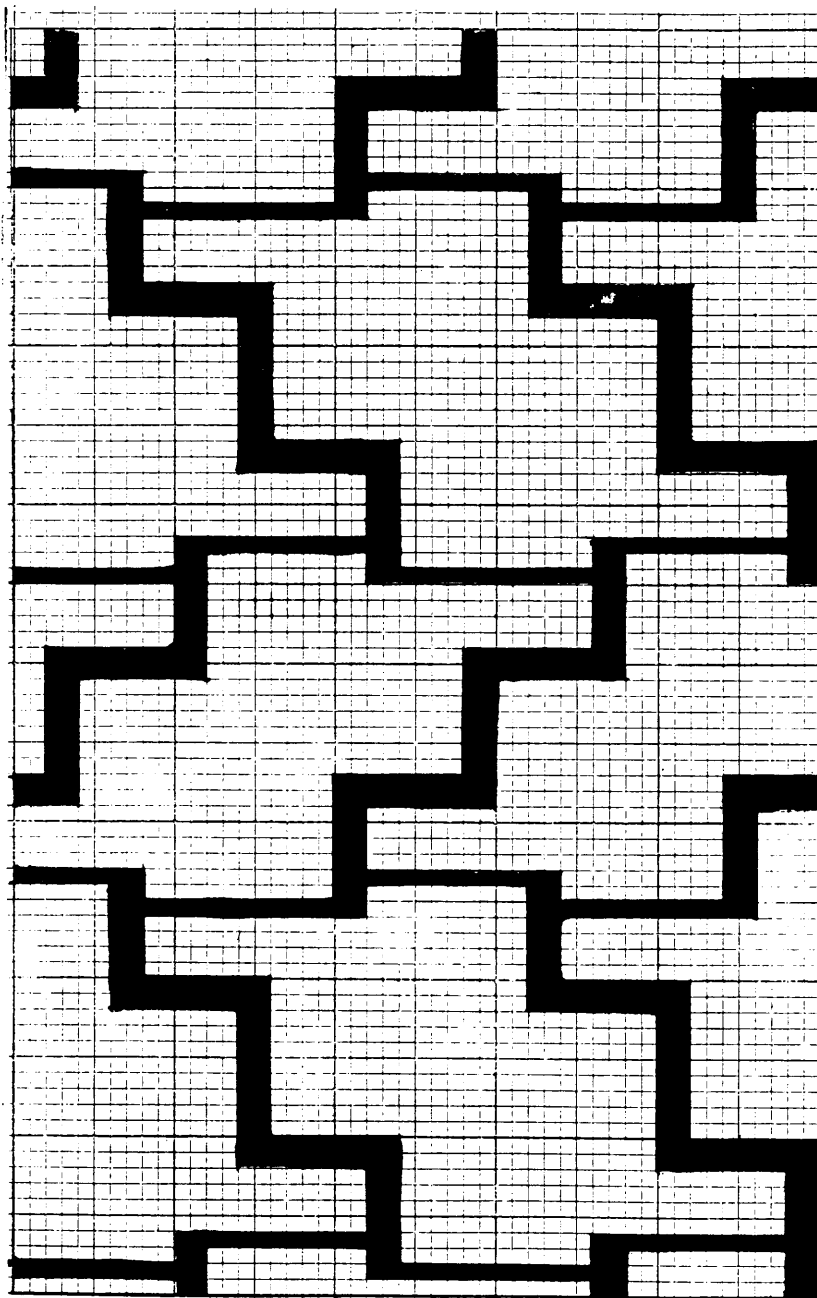
Detail of different types and forms of working "laid-in" technique were given in News for Nov-1941. This is available for 45¢ each. Or an exhibit and lesson on laid-in weaving may be had for \$3.50.

Figure No.1 above is a place mat. Make a warp of carpet warp 120 threads wide. Put two threads in each of the edge slits. This will measure about 12" when woven. Weave about an inch for a hem of plain weave with carpet warp single for weft. Then put in four rows of pale blue Home-craft cotton, with a row of the carpet warp between. Now start a new pattern weft on the right and put it in only 10 threads from this edge. Turn the weft on the left into the same shed, and put a row of carpet warp in the same shed. Then change shed and put in another row of carpet warp. Change shed put in pattern etc. Always put a row of plain weave in shed with the pattern weft, then another row of plain, and so on. The design above should be easy to follow.

Figure No.2. This is a runner made of white carpet warp with beige Home-craft cotton for the lengthwise lines, and small spots of laid-in. Make a warp of 160 threads of carpet warp, and six lengths of the Home-craft cotton. The carpet warp is threaded through a hole and a slit, the Home-craft cotton through a slit, the carpet warp through the hole, then another length of the Home-craft cotton through the next slit. The warp was spaced in the heddle so the heavy cotton stripes were about 4" apart. On the edges of this runner two warp threads were threaded through 3 slits with a single thread through the eye to give a heavier edge. The small figures were put in with the laid-in technique.

Figure No.3. This curtain was set the full width of the heddle of the Hearthside loom. Make a 12 yard warp

Figure No.3



of 322 threads of white carpet warp. About 5 spools will be needed. Plain weave weft is light grey carpet warp used single, 2 spools of this are needed. Laid-in pattern was of cream color Home-craft Soft Spun cotton, and three balls are necessary. Thread two threads of warp in a slit and one in a hole for the width of the heddle.

It is very easy to follow the design at the left. 2 squares of the cross section paper are equal to one inch of the warp.

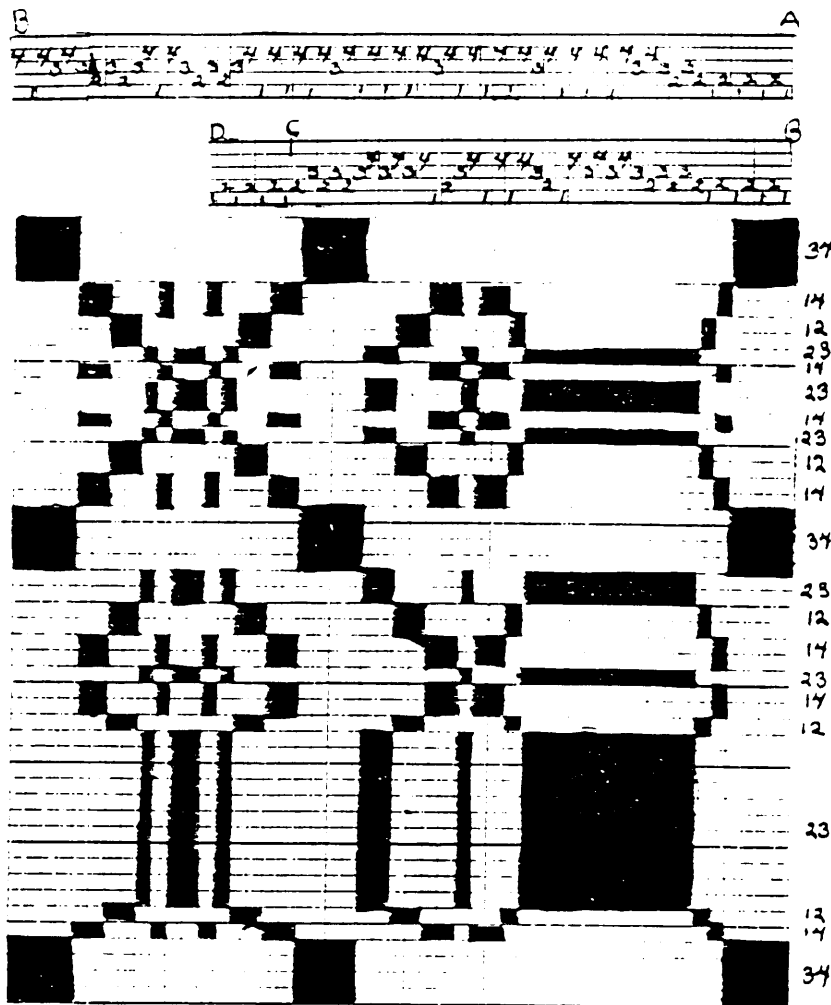
Weave a plain weave heading 4" wide for the hem, then start the design. Measure carefully and place the design where it belongs, starting three separate strands for the laid-in design.

If desired the design can be drawn out in actual size and pinned under the weaving to the heading. But it is not hard to follow the design as given if the measuring is done carefully. One full repeat and about one-half of another is given.

These are very handsome curtains and some of you may be able to see them if the Museum of Modern Art Exhibit comes to your city. Be on the lookout for it. And if you need some good curtains, I am sure you will like these. They are simple, easy and quick to do, and smart enough for any room anywhere.

I shall be glad to hear from any of the Hearthside loom weavers who use these articles. Let me know how you like them.

HANDWEAVING NEWS



Over-shot Pattern Threadings for Tree Designs from the Speck Book.

A number of requests have come in since the June News went out, asking if it is not possible to use those patterns on the 4 harness loom. It is possible with some adaptations, so here they are. I hope 4 harness weavers will find them useful. There are many interesting ways these threading drafts may be used. They are especially good for many borders for such things as towels, luncheon sets etc. They are all arranged for a warp of 420 threads, and may be woven on No. 20 2 cotton warp set at 30 threads to the inch. In all of the threadings the large square block of 14 units has been broken up by putting one thread on harness 3, with the pattern block on 1&4. This is woven all on 1&4 and gives the effect of a solid block. When weaving, repeat each pattern block enough times to square it. The number of times to use the weft depends on its size and how close one beats down the weft, so note that the numbers at the sides of the key drafts refer to the order of the treadling and to the levers of the Structo loom. For a treadle loom, the tie-up would be just reversed. I am sorry the photo of the original design from the Speck book was not better, but I think the patterns given here will be clear.

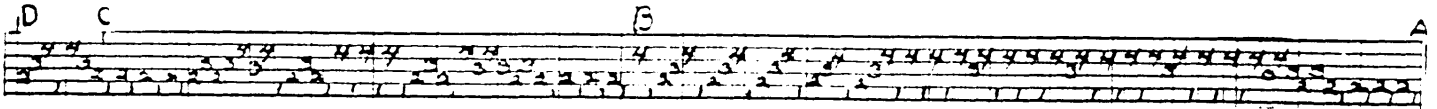
To arrange the threading draft No. 1 above, thread the border A to B, 66 threads, then B to C repeated 7 times 40 threads, C to D 8 threads. Finish with the left border B to A 66 threads to complete the warp of 420 threads.

There are three different tree designs on Page 3 of the June News. Each of these designs make a different corner and tree, but the center repeat is the same. In writing the threading drafts, there is a slight difference in the center repeats, but the woven effect is about the same if the order on the key draft is followed.

August 1943

Nellie Sargent Johnson 12489 Mendota Ave. Detroit, 4 Mich.

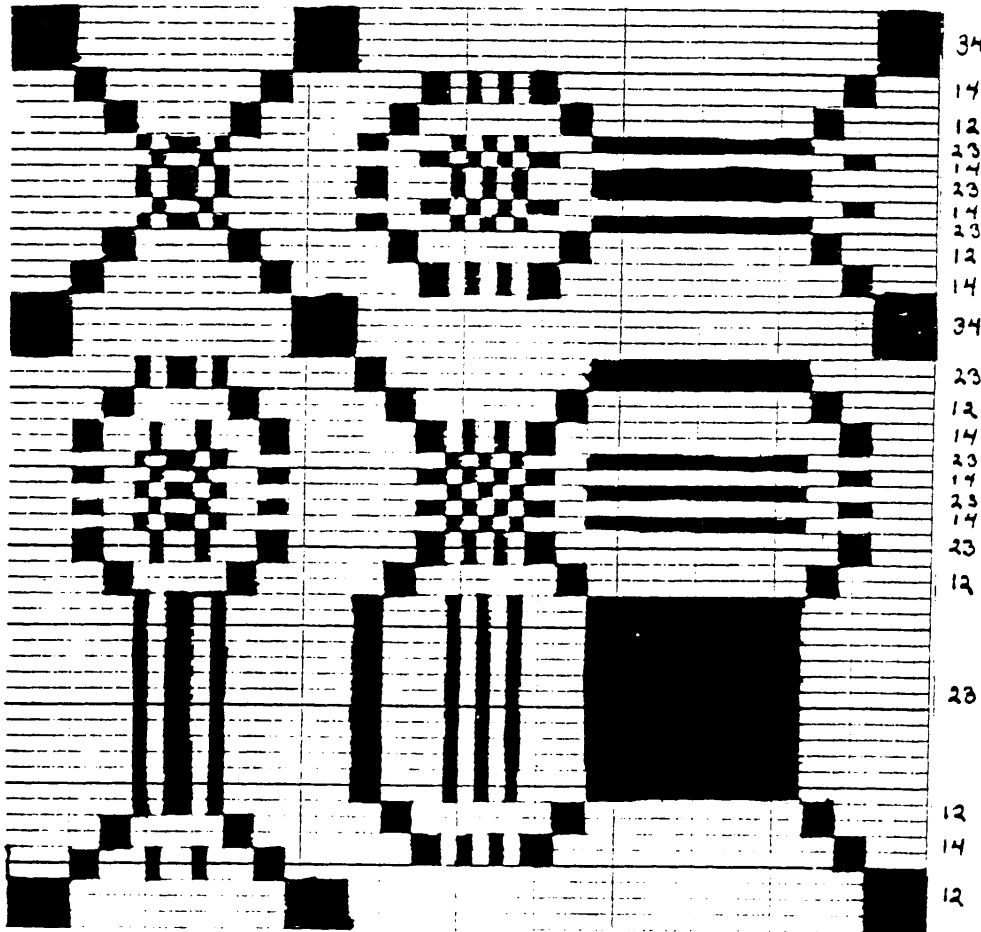
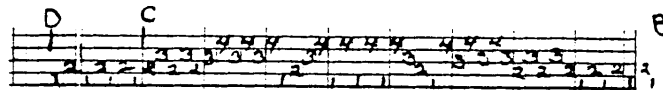
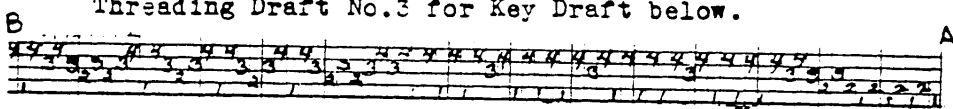
Threading Draft No.2 for Pattern Key Draft Page 3 of June 1943 News.



To arrange this threading for a warp of 420 threads, thread as follows,-
 From A to B for the right hand border, B to D 50 threads repeated 5 times,
 C to B 42 threads, then the left hand border B to A 64 threads.

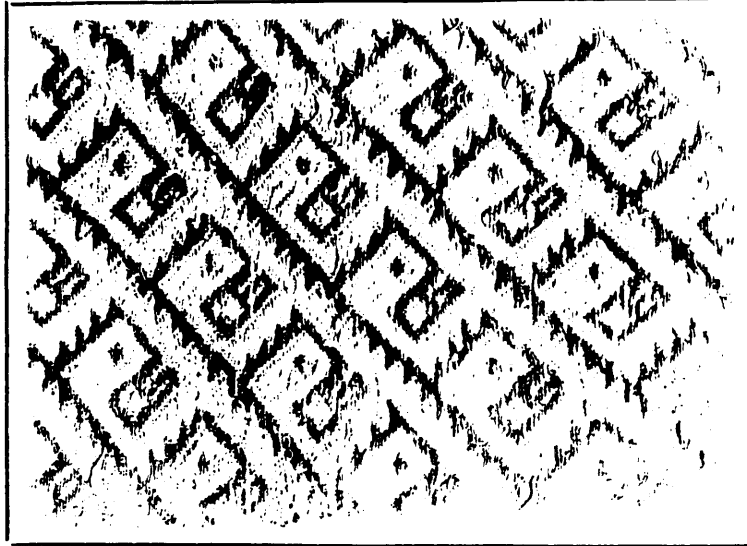
The order of treading is as follows,- The numbers refer to the levers of the
 Structo loom, and the number of times to use the weft is not given as it depends
 on the size of weft used, but weave to square each pattern block, and follow the
 key draft design. --- 34,14,12, 23 repeated for the large square. Then 12,14,23,
 repeat this order 5 times for the tops of the trees. The center repeat is 34,14,
 12,23,14,23,14,23,12,14,34, for the large figure. Then 14,12,23,12,14 for the
 small figure. The center may be repeated as far as desired, then the large figure
 and then the trees in reverse for the opposite end of the place mat, runner or
 what ever is being woven. On the other key drafts of the tree design the small
 center is not included, as in this key draft. It may be added to the other drafts
 id desired.

Threading Draft No.3 for Key Draft below.



Thread 1,2,3,4,
 12,3,4, at the
 beginning. Then
 Border A to B
 76 threads.
 B to C 42 threads
 6 times.
 C to D once.
 B to A for left
 border. Then to
 end 4,3. 2,1, 4,
 3,2,1. First and
 last thread is
 threaded double
 to use up the extra
 two warps.

HANDWEAVING NEWS



Double Brocaded Ancient Peruvian Textile.

The above photograph is of one of my very rare Peruvian textiles. I have called it an ancient double form of brocade. The textile is not a double cloth, but must be woven of at least two colors. The D'Harcourt book "Textiles of Ancient Peru" shows one exactly like mine, they may be off the same cloth. I do not know, but the technique is the same and in all of my study of textiles while I was in Peru, I did not see another example of this particular kind of technique, and I consider myself to be very fortunate to own it. In this piece, red is used for one color and golden yellow for the other. The detail of the technique is to pick up the first row of the technique with red on an open shed, and the shuttle is brought into the shed and then up on top of the warp threads, into the shed again, and out on top of the warp threads all across the width of the loom. Then take the yellow weft shuttle, and in the same open shed, go over the warps where the red weft went into the shed and under the brocade skips of the red weft. Thus both wefts go under one warp thread as shown on the detail of the method of working the technique. There is no plain weave shot between each row of brocade, but the back of the textile shows only the plain weave. After the two rows of brocade have been put in on the first shed, open the opposite shed and put in the next row of brocade pattern first with the red color and then with the yellow, and so on. This type of weaving can be woven on any loom which allows a plain weave shed.

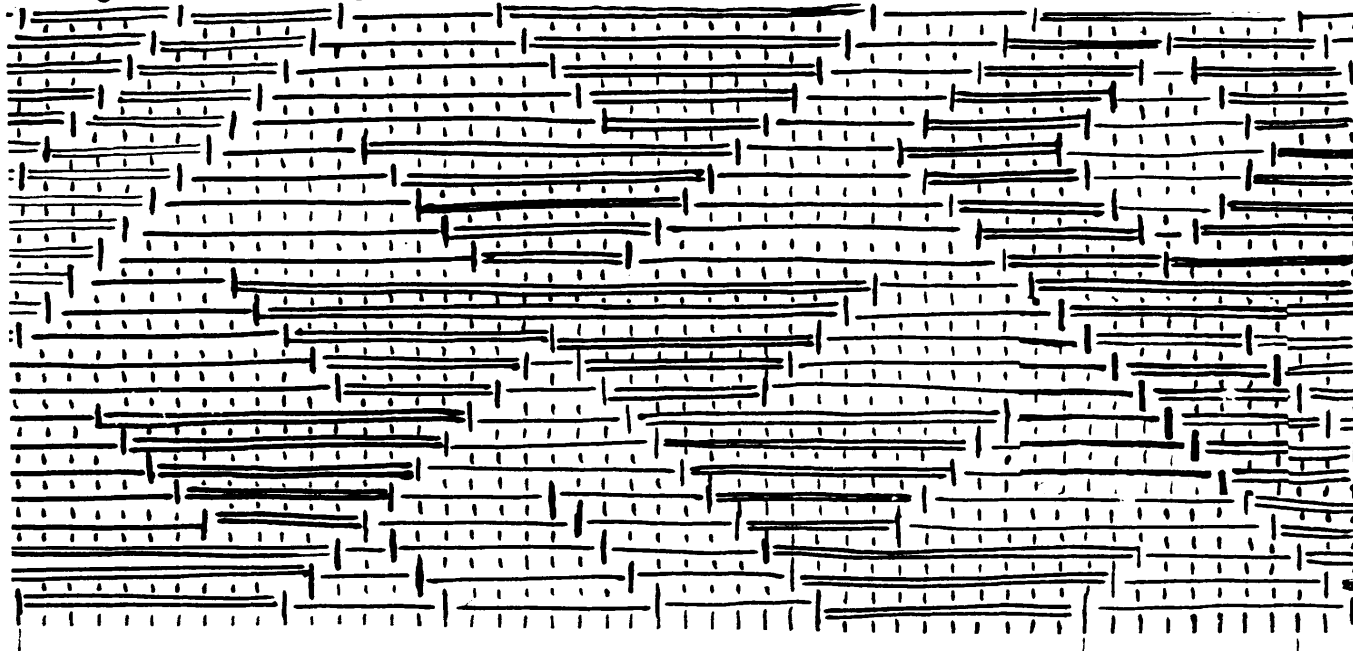
The ancient piece has about 32 warp threads to the inch and the warp is about the size of 20/2 cotton. The wefts are of two ply wool, though some of the red weft seems to be only single ply. There is a selvage on one side of this piece so it is possible to see how the wefts turn back each time.

The detail of the design which is given on the next page is a drop repeat of interlocking figures, possibly sea serpents or bird and wave designs. It is truly an amazing design based on the geometrical progression of one, three, five, seven, eleven, and thirteen. White squares on the enlarged detail of the pattern indicate the warp threads under which both of the weft colors pass.

September 1943

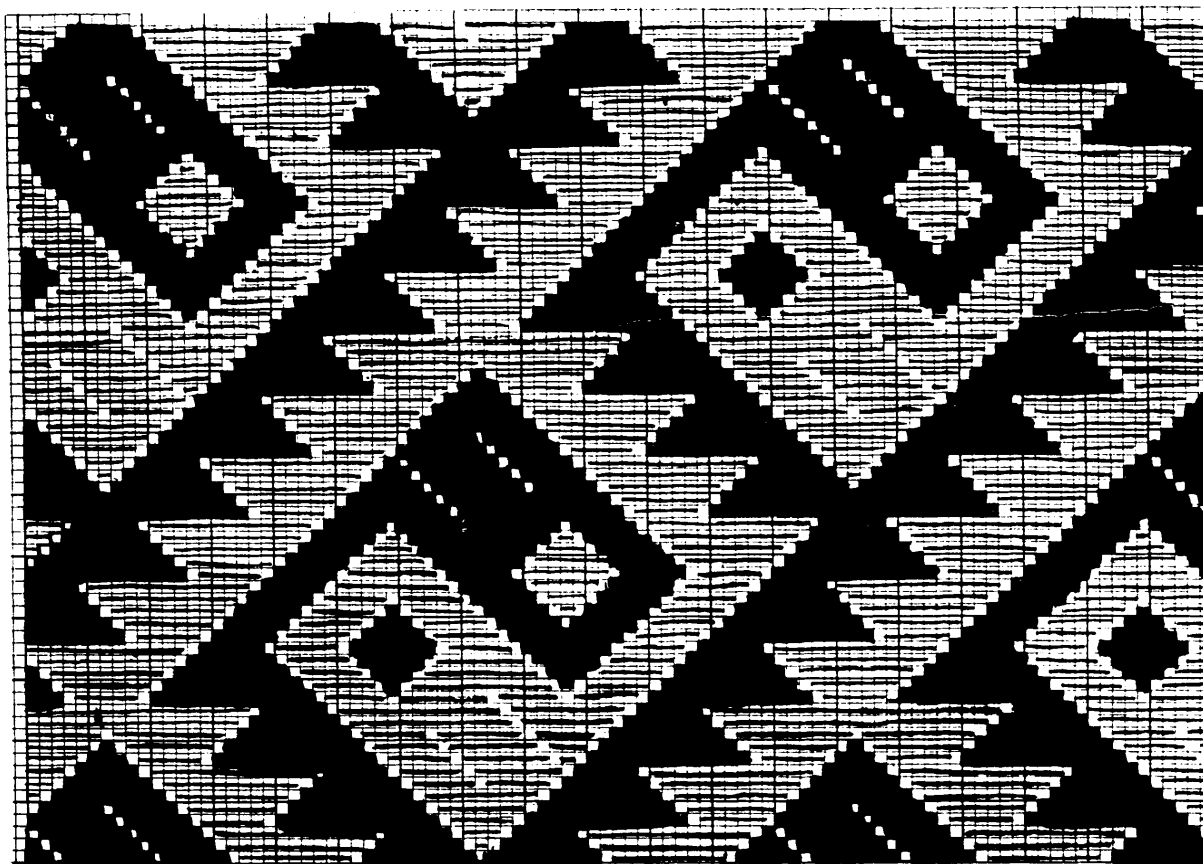
Nellie Sargent Johnson 12489 Mendota Ave. Detroit 4, Mich.

Figure No.2 Enlarged detail of the Method of Working the Technique.



This enlarged detail of the pattern design is the same as from A to B on the design below, and with this as a help, it should not be difficult to follow the pattern below if desired. The double lines above indicate one color and the solid ones the other color. The dotted lines are warp threads underneath the brocade.

Figure No.3 Detail of the Ancient Peruvian Pattern taken from the Textile.



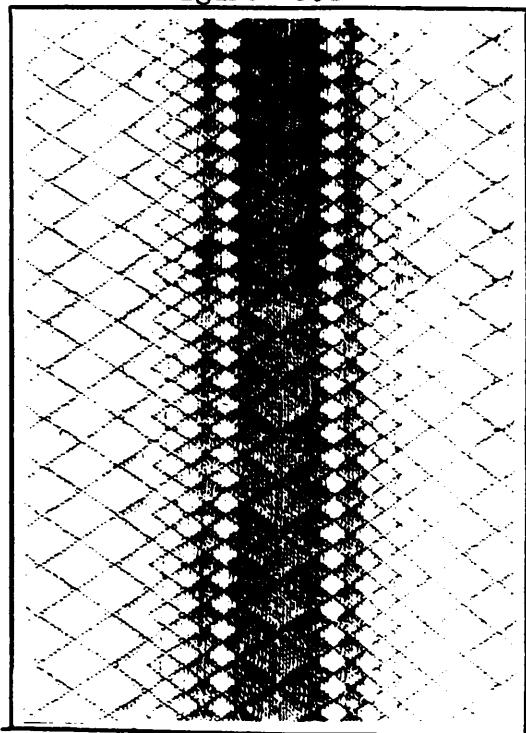
Detail of Double Brocade Technique.

In order to follow the design at Figure No.3, it is easier to draw an enlarged detail as at Figure No.2. Take a piece of cross section paper with 4 to 8 squares to the inch. On the vertical lines of this paper draw a single line for one square. This represents the single white square on the design of Figure No.3 and is one warp thread. Put in these single lines on the diagonals as they occur for exactly one repeat of the pattern, and be sure they are correct. One square or one line out, will throw the whole pattern out. After these single lines are in, draw horizontal single lines for the dark color, and double lines for the light color. When beginning the first row of picking up the pattern, be sure it is counted correctly. This first row is the hardest row to do, the others will follow easily after it is in correctly. Also watch where the same pattern color goes under the single warps to break a long weft skip. This occurs in both the light and dark pattern color of the Peruvian design. It is less complicated to keep the same color for one skip, and then go under the next skip as in the photograph of the modern piece below at Figure No.4.

Detail of the Method of Weaving.

Weave a plain weave heading of an inch or so to make a good foundation to beat against. Open the plain weave shed. Start at the right edge and pick up the design for the dark color. To make a better edge go into the shed under 2 of the raised warp threads each time the shed is changed, before beginning the pattern design. Then bring the pickup stick out of the shed and on top of the raised warp threads go over 8 warp threads, 4 of these warps will be up and 4 down as at Figure A to C No.2. Go under the 9th warp, then down into the shed for 10 more warp threads, indicated by the double line of Figure No.2. Then out on top again for the dark color and over 5 warps, under 1, over 7, under 1, over 5 and so on for the width. Remember where the light over-shot comes on top, indicated by the double lines, the pickup for the dark weft will be in the shed. When the dark row is picked up, turn the pickup stick on edge and put in a shot of the dark color. Then pick up the warps for the light color. Go into the shed under 2 warps on the edge, and in the shed for 9 warp threads under the dark color over-shot, then out on top of the warp for the light over-shot over 9 warp threads, down into the shed and under all of the dark weft color, and so on for the complete width across the loom.

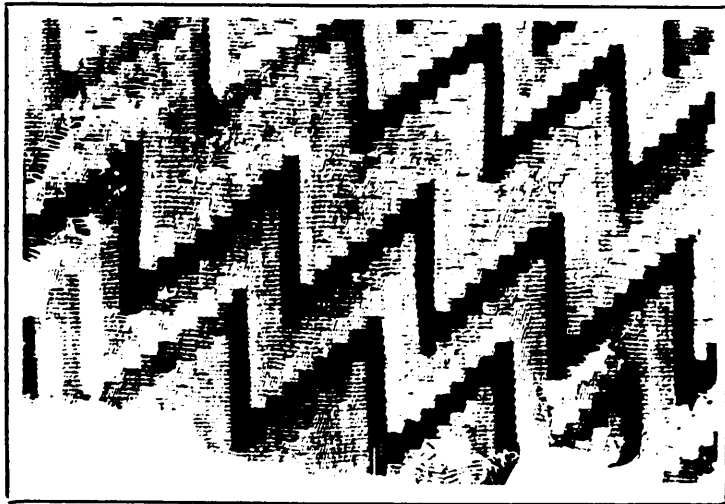
Figure No.4



For the second row start at the right with the pickup stick and pick up in the same way. Turn pickup stick on edge and pass weft thro first for the dark color, then pick up the light. It takes one shot of dark and one of light color for each row and there is no plain weave shot between rows. The fabric has an over-shot of dark and one of light on one side, and is plain weave of alternating colors on the other side. At the point where both colors go down into the shed and up on top of the shed, both colors go under the same warp thread. Note that the pattern design is increased or decreased on succeeding rows. News subscribers will be interested to know that this is the first time, to my knowledge, that this technique has been correctly written up in the English language.

At Figure No.4 is an upholstery fabric woven by one of my Wayne University students. Warp is brown mercerized cotton No.10, at 15 to the inch. Weft is shades of rose, rose gray, and blue green yarn about the size of shetland. Use a soft weft which fills up better than a tightly twisted thread.

HANDWEAVING NEWS



Ancient Peruvian Slit Tapestry.

The photograph above is of a fragment of one of my ancient Peruvian tapestries No.T38. There is no joining of the weft colors as they meet each other, but a slit is left. However the wefts are so fine and closely beaten together that these slits are not very obvious. This type of technique is often called "kelim". And it has been much used for rugs and carpets from many countries bordering the Mediterranean as well as in other parts of the world.

This technique may be woven on any two harness loom or in fact on any loom which allows a plain weave shed, and many different warps and threads can be used. But the warp must always be spaced far enough apart, or the weft used be fine enough, so the weft will completely cover the warp threads. In the piece above, the warp is about the size of 24/3 cotton, firm and tightly twisted. It is set about 16 threads to the inch and is of natural color cotton. The weft used was very fine wools, and the colors two shades of red, and tan and yellow. The latter color is faded so it almost looks like the tan in some places.

The design of this piece is a simple all over repeat of geometric forms, and the slits are all about the same length. Some of my other fragments in this same technique show very short slits built up to form triangular shapes, horizontal lines with diagonal ends, and small squares. These small squares often have still smaller squares inside of them. Another feature of many of these fabrics is the single wrapped warp thread always of another color than the adjoining wefts. Sometimes these single wrapped warps are an inch or more long. The color is carried along as in the diagram at Figure No.3, and is usually, in the samples I have, of much finer weft than that of the squares on each side of it. The time it must have taken to weave these very fine textiles, and the infinite amount of patience is one of the things which make one marvel today at these interesting ways in which technique was used by these ancient Peruvian weavers. At Figure No.4 is another way in which a diagonal figure was built up. In this case the weft was carried back down, interlocked as I have drawn out, and then another figure started with the same weft as before.

The drawing below at Figure No.1 is the design of the original piece. This can be used as is, and would give a very modern effect, or suggestions taken from it, for another entirely different design if desired. One square of the cross section paper design equals three warp threads, and is the same plan as in the original piece. Of course the slits may be woven as long as desired. But in this piece they are woven to square the 3 thread warp unit. However in the design below I have only drawn the weft across four times and back. These lines indicate the dark red color, the two short verticals indicate the rose color weft, the X's the yellow weft, and the O's the tan weft. And of course where two X's etc are drawn, it means that the weft goes over 6 warp threads, back and forth enough times to make the unit.

On page 3 Figure No.2 is the detail of the method of working the technique as I have worked it out. Open the shed which brings the edge warp thread on the right down. I call this the down shed. Always begin and end a color on this down shed. Note that where the colors turn back around the warp thread, one color is always over the warp and the meeting color is under the adjacent warp thread. It is easier to have all of the wefts go in the same direction, from right to left in the down shed, and left to right in the up shed.

Note on Figure No.2 the stars *'s. These places indicate the way the weft advances to the left and to the right when the pattern design changes. You will see that the two wefts come in the same shed for a short distance. If well beaten down, this will not show.

Figure No.1 Drawing of the Design of Ancient Peruvian Slit Tapestry T 38.

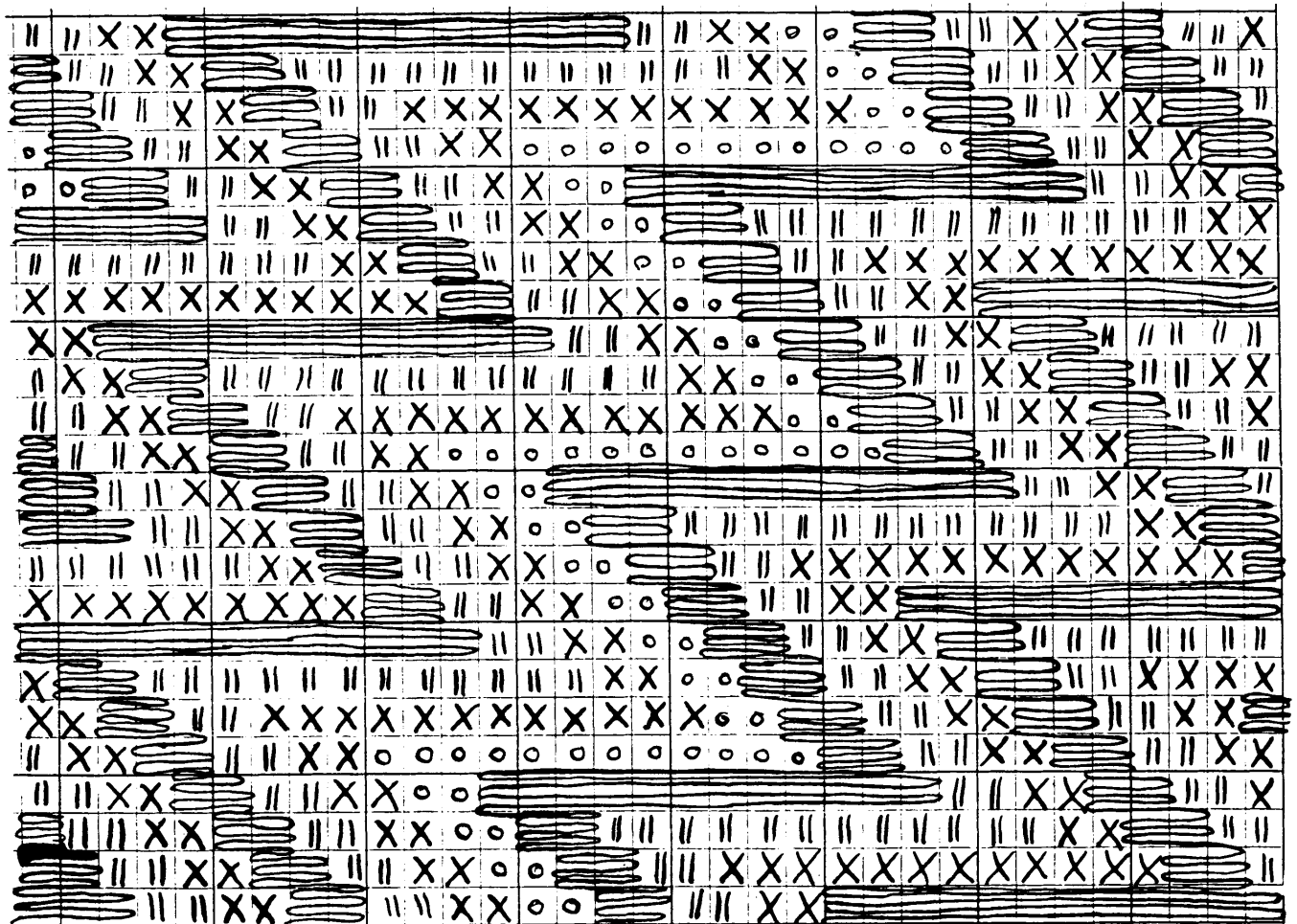


Figure No.2 Detail of method of Working Slit Tapestry Technique.

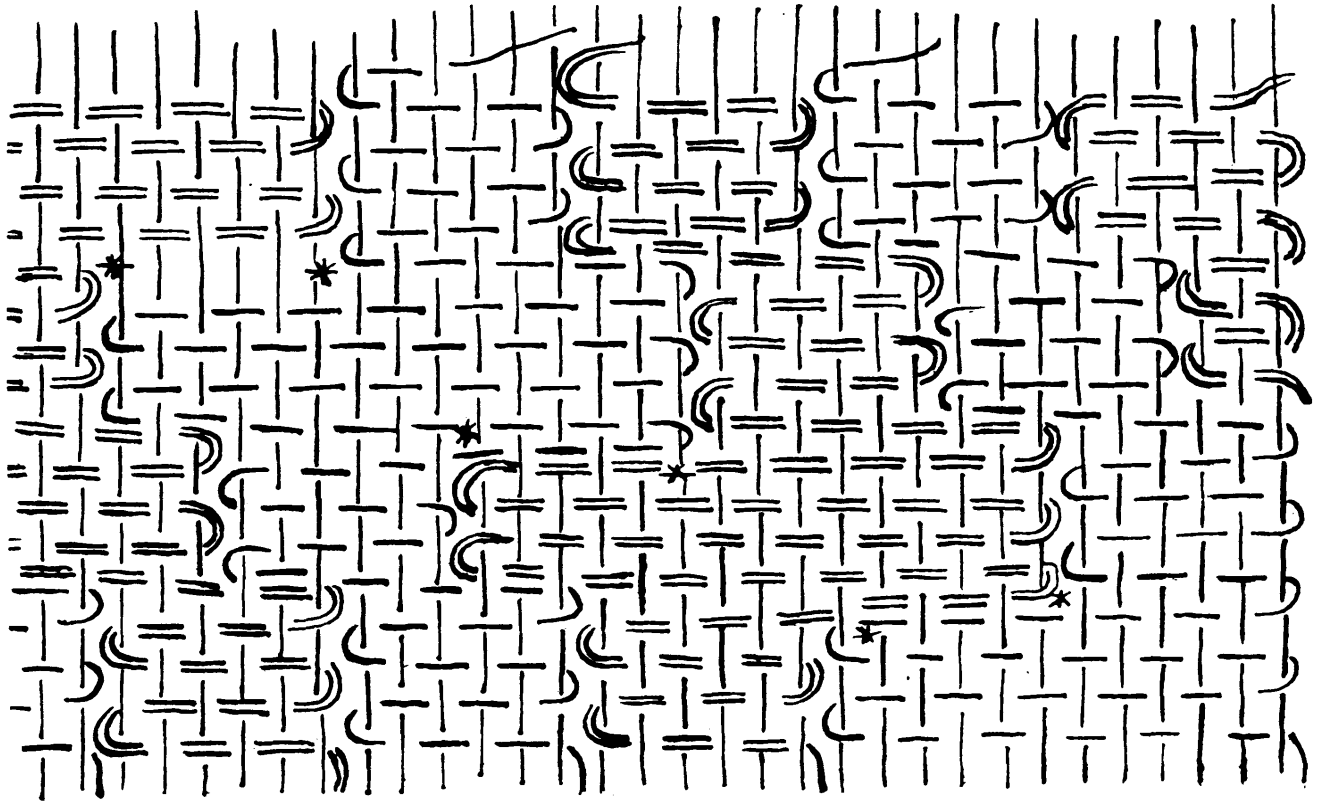
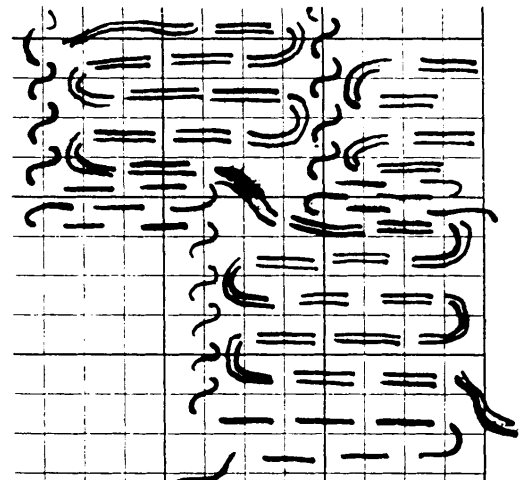
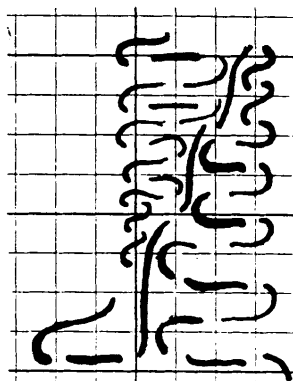


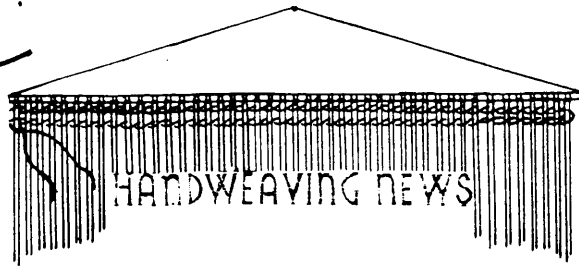
Figure No.4 from T #32.

Figure No. 3 from T #30



The variations shown at Figure No.3 and 4 are two ways in which the technique can be used, as was found on two more of my Peruvian fragments. I believe they should be clear from the drawings, but if they are not, let me know and I will try and explain them further. I might also add that as far as I know the above techniques have never been described in any other place. If any one knows of a place where this same material has been given, I would like very much to know of it. I have two pieces of the piece shown on Page 1. One of these I shall be glad to sell if anyone is interested and wishes to own a real ancient Peruvian mummy textile. Price is \$20.00.

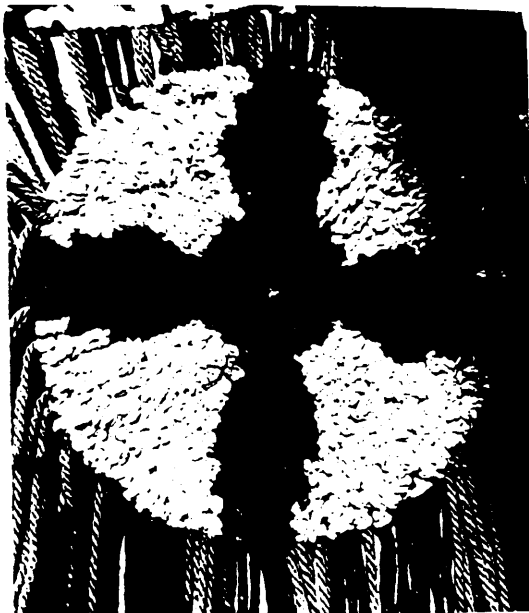
Thank you for your nice
letter. I appreciate it very
much. So glad to know the
Code drafts were helpful.
Nellie S. Johnson



"One Beam" or "Broomstick Loom" Weaving.

This month I am going to present some of the newer uses for broomstick loom weaving which have been of much interest to my own students, and which I am sure will be equally interesting to all who may wish to try them.

It was in the 1936 News that I first presented some of the ways in which I had used this very ancient form of weaving, and since that time much has been done in this technique. It developed in my own classes, due to the fact that many of my students did not have looms, and I believe it is an easy simple way to arouse an interest in weaving in both adults and children. The use of this technique would be valuable in summer camp work as well as in Occupational Therapy work, as very simple easily available equipment is all that is required. And also almost any kind of thread or yarn, rags, stockings, etc. may be used for warp and weft. Well designed rugs present a real problem for the design student, and they can be woven plain or with a rug knot all over, or combination of the two. They are thick, heavy and stay on the floor well. Belts, bags, caps, etc. can be woven as smaller projects. For a description of these techniques, I still have the News for July 1941 available at 45¢ a copy.



I also have available an exhibit of some articles woven in this technique which will show many of the useful attractive ways it may be used. The cost of this is \$ 5.00 plus carriage charges for a period of one week.

The round rug at the left was a new idea which came from one of my students who did not want a rectangular rug. She asked me if she could make a round rug. I told her I had never seen one made, but to try it. The next week she came in with one all done. And here is a description of how it was woven.

How to Make a Round Rug. Use heavy Rug Filler, Rags, or Home-craft Soft cotton double; for the warp and weft. Make a round loop ring of the rug filler, or warp as at Figure No.1, Page 2. Loop as many warps as possible into this ring as at Figure No.2 Over double warp threads do the regular twining of the technique as at Figure No.3. for about four rows to start. The loop ring need not be more than two inches in size.

Figure No.1
Making the loop



Figure No.2
Putting warp into loop

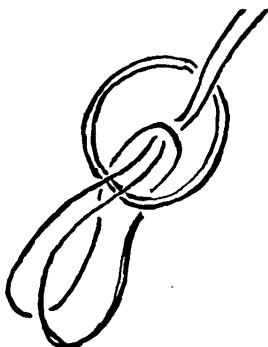


Figure No.3
Regular twist technique

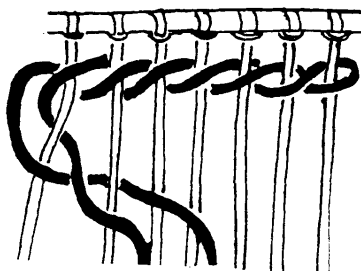


Figure No.4
How to Make Knots

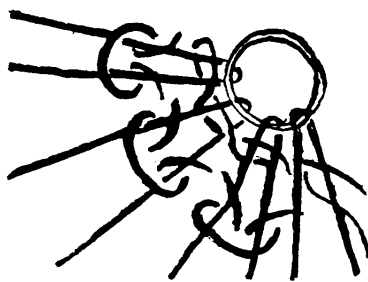
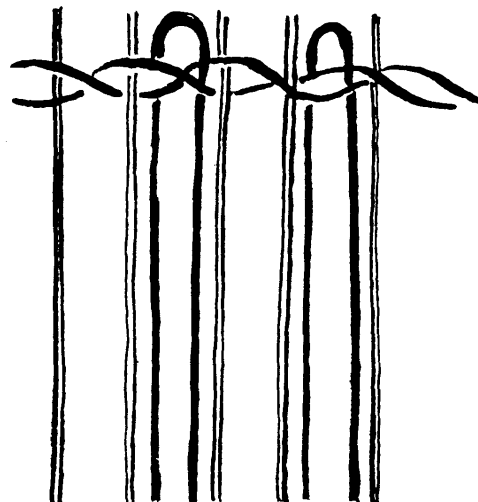


Figure No.5

How to add Extra Warp
Threads



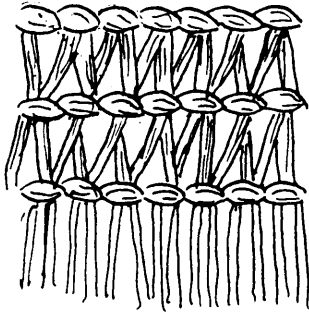
To hold the ring while working put a nail in a board or a stout pin, and put the ring over this. Keep the work as flat as possible. It is also better to work at a table than to try to hold the material on one's lap. Also be very careful and not pull the weft twists too tightly or the rug will cup up and be very uneven. As soon as three or four rows of the twining are worked, the knots can be put in. Rug filler, heavy rug wool if it is available, or Home-craft soft cotton used double can be used for these knots. Cut quite a number of short lengths about 3 inches long. A good way to do this quickly is to wind a good bit of the material around a piece of cardboard 3 inches wide and then cut into the short pieces. Put in a row of knots as shown at Figure No.4 above. Then do three or four more rows of the plain twining technique, and put in another row of the knots as before.

For more detail of the regular twining technique, and how to wind a double weft bobbin, how to add a new weft etc. refer to Handweaving News for July 1941. Copies of this are available at 45¢ each.

Adding new Warps. As the weaving continues and the circle gets larger, the spaces between the wefts of the twining get longer. When these get to be about one half to three quarters of an inch long it is necessary to add more warps. Cut lengths of the warp, double it, and put the loop right in the twist of the wefts as shown at Figure No.5. At first these can be put in about 6 or 8 warp threads apart. Add more as the circle gets larger. As the extra warps are put on, let them hang loose and then on the next row weave them in the plain twining technique as before. Continue to add the rows of knots, then the rows of single twining between until the rug is large enough. Do about four rows of single on the edge after the last row of knots. Then stitch close to the last row of knots on the sewing machine. It is better to bind or face these rugs, than to let the fringe of rug filler lie loose and knot it. Cut off the extra warps about an inch wide all around, and then bind with rug binding, or heavy material cut on the bias for a binding or facing, and the rug is finished.

If a plain twined rug without knots is desired, this can be made quite easily also as the places where the extra warps have to be added as the circle grows larger show but little. Here is an entirely new and fascinating way to use an ancient Indian technique, that I am sure you will enjoy doing.

Figure No.6



Variations on the Twining technique.

There are a number of interesting practical ways in which the regular twining technique may be used to weave bags, belts, decorations for the pocket of a dress, bands etc.

1. At Figure No.6 is shown a method of separating the warps, and weaving two together each time. To make this show up well, start the warps by placing them further apart than for the regular twining weave. Try this out using several colors in the warp for a belt or bag. The spaces left between the rows of weft can be gauged according to the space desired and the kind of materials being used. This type of weaving goes very fast. Candlewick cotton or Home-craft Soft cotton will make very good looking bags.
2. Twisted single warp threads. Instead of separating the warp threads as above, twist two of them together, then work them singly with the regular twining technique. A space can be left between the rows or they can be worked close together as desired.
3. Crossed single twining. At Figure No.7 is shown how single warp threads can be crossed and woven. This too is most attractive and quite a number of variations of this simple technique are possible. Start with the regular twining, and on the next row or two below, the warps may be crossed as shown. Belts and bags are attractive made this way, and this may be introduced along with the regular technique too.
4. At Figure No.8 is shown a bag and a belt woven with crossed double warps. Several shades of brown and yellow were used for this. The darkest shade of brown was used for the weft throughout. The warps were of double German-town yarn and when crossed looked like small leaves, an unusual and very attractive way to use this technique. This was woven by Ruth Eva, one of my students and is an entirely original use of this technique.

Figure No.7

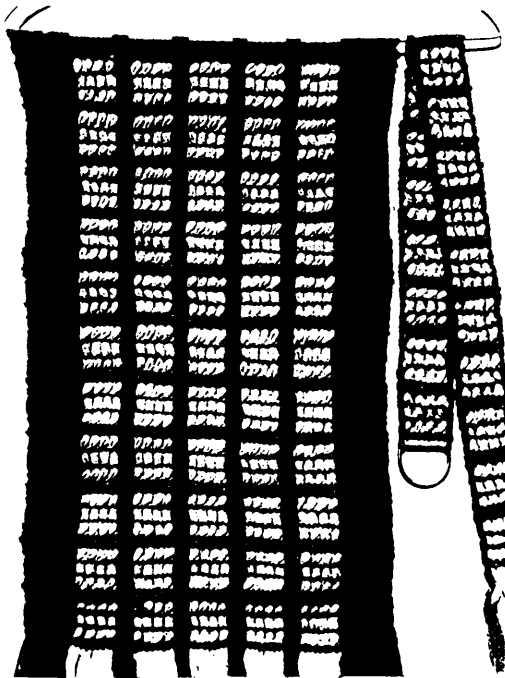
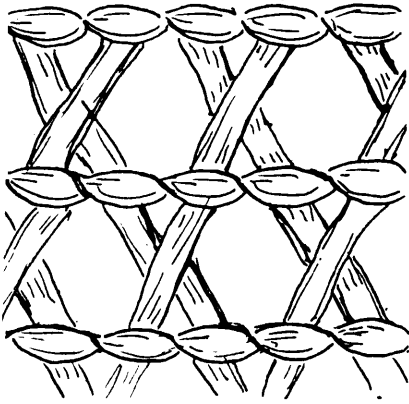
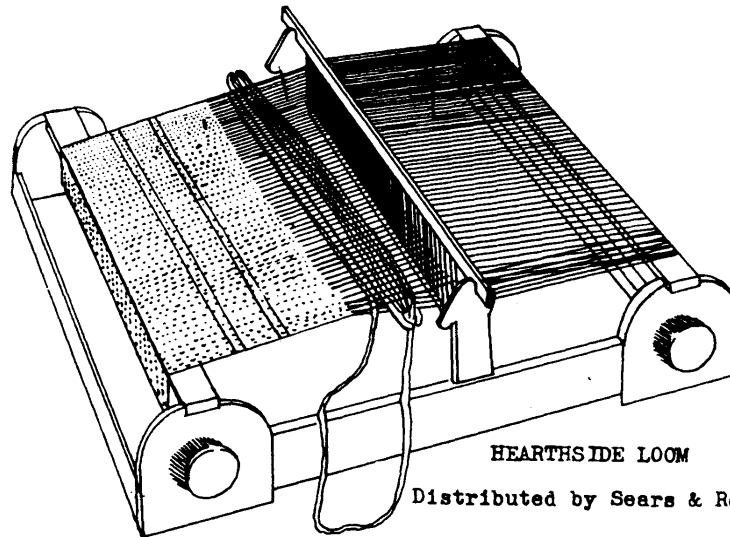


Figure No.8

Subscriptions for 1944 Handweaving News are now due, and I hope all of you will have found that this monthly instruction has been useful and interesting enough, so you will wish to continue having it every month. There are some of you from whom I have not heard. Will you not write and tell me what interests you the most and how I perhaps might make the News of personal interest to you.

Weaving is going to have a very important part to play in the Rehabilitation program for our returning soldiers. Have you begun any work of this sort? If so, what?

HANDWEAVING NEWS



HEARTHSTIDE LOOM

Distributed by Sears & Roebuck Co.

Weaving on the Hearthside Loom.

A number of requests have come to me for more articles which can be woven on the Hearthside loom. So I am presenting this month some of the weaving which has been done recently on this loom, by my own students.

Weaving for Men in the Army or Navy. During the past few months it has been my privilege to teach some of the service men in one of the hospitals here in Detroit. I have found the boys to be especially interested in weaving wool scarves for their own use, and also belts. For these we have used the Hearthside Loom.

Wool Scarves - Make a warp of 90 threads. For this use either Germantown yarn or any yarn about the weight of that used for the knitting of socks. We have found the latter to be somewhat easier to use in the heddle. The Germantown sticks a little and roughs up more when the weaving is going on, but if the little flecks of wool are picked off as they occur on the heddle, Germantown yarn can be used. For boys in service, use khaki color to fit army regulations. For the navy, a good dark navy blue. For each scarf, allow about one and three-fourths yards of length for the warp. This allows the scarf to be about one and a half yards long when finished. Use Germantown yarn for the entire weft of the scarf. When weaving, take care and not beat the weft down too closely or the scarf will be too hard, as the yarn pulls together quite a little when removed from the loom. Also do not pull the weft yarn as it is put into the shed, let it lie in the shed on a long slant, then push it down carefully against the previous row of weft with a light beat. This is important. For if the weft is pulled in too much the scarf is made too narrow and if pulled in too much may actually break some of the edge warp threads, so watch this, let the weft lie loosely, pulling it in just enough so there are not loops on the selvage edges of the scarf.

Belts. Can be woven of carpet warp using the dark tan color. For these make a warp of 60 threads. For weft use the carpet warp double or even four strands can be used for a thicker belt. When tying this warp to the front cloth beam of the looms, pull the warp threads close together to a width of about an inch wide. The shuttle is used to push the weft close, each time the heddle changes the shed. The heddle is not used at all to beat the weft close, as the warp threads are too close together. For directions for belts of this sort in pattern, refer to the News for December 1938, which can be had for 45¢ each.

New metal Heddles. The Hearthside Loom is now sold with a new metal heddle. This is a decided improvement in the loom, which we are sure many of you will wish to know about. As the loom was originally designed, the metal heddle was to have been used, but due to war conditions when the loom was first sold, plastic had to be used instead.

How to Beat the weft close with the Hearthside Loom. This applies especially to the use of heavy rug filler or rags as weft. Raise the heddle, pass weft through the shed thus made, on a long slant as shown at Figure No.1. Do not stretch the weft or pull it, let it lie loosely in the shed. Draw it into the shed just enough to keep it from looping on the edge warp threads, but do not pull it in at all. Watch the edge warp threads to keep them straight from the heddle to the width of the weaving. If the warp is pulled in so the width is narrowed, you not only lose the width of the finished weaving, but it also makes it very difficult to beat the weft thread close enough. Lower the heddle for the next shed. Take hold of the shuttle with both hands at the edge of the weaving, and with it push the previous row of weft down close, then pull the shuttle through this shed with the weft again on a slant, push close with the heddle. Change shed, push close with the shuttle, and so on. A coarse comb can be used to push the weft close if desired, but is not needed if the above is followed carefully. If the weft is pushed down close to the previous row after the shed is changed, it will come closer than otherwise. If you are a beginner, do not be discouraged if you have to practise this to get the desired effect and to get straight edges.

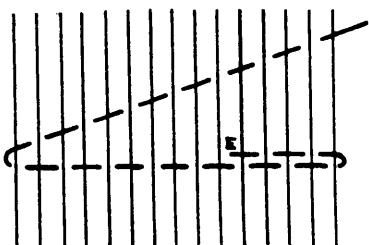


Figure No.1
How to put in weft Threads.

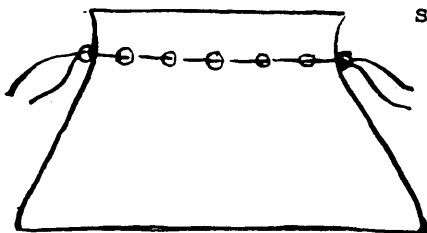


Figure No.3

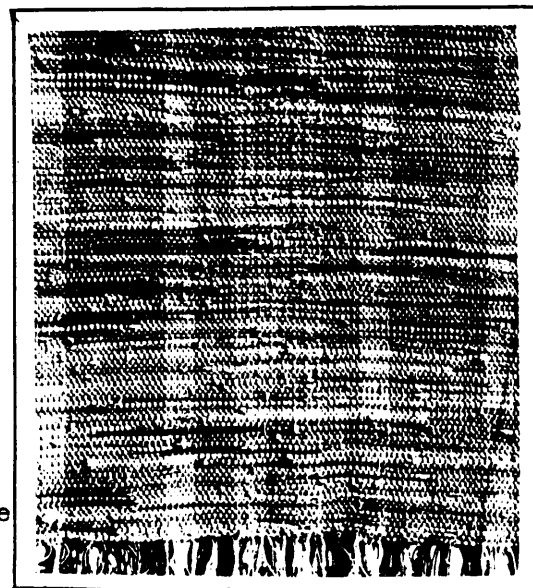
Draw String Bag. Now that bag frames are difficult to obtain, we see many of the common type using a simple draw string cord. These bags can be very attractively woven on a striped warp. For these use Homecraft Soft Spun and Heavy Rug Filler for the weft, in the following manner,-

10 shots soft spun white or tan, 1 shot of heavy rug filler, same color. One shot soft spun, one of heavy, one of soft spun, one of heavy rug filler. Repeat this from the beginning until about 15 to 18 inches have been woven for one bag. Fold on the center stripe for the bottom of the bag, so that the selvage edges form the top of the bag. Stitch up the sides, and fold in the corners, stitch in the lining. Sew rings on outside and make a draw string cord to pull through them and the bag is finished.

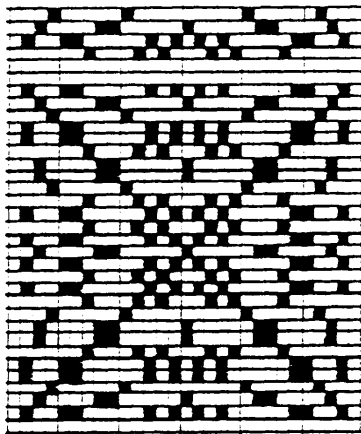
Striped Warp Rug of Looped Stockings.

At Figure No.2 is shown a very good looking rug woven entirely with stocking weft on a variegated colored warp. This is an excellent way to use up left over small amounts of warp, and of course any color arrangement can be used. Warping order, - 12 tan, 5 blue, 3 gray, 5 red, 10 white, 8 blue, 5 gray, 8 red, 5 gray, 8 blue, 10 white, 5 red, 3 gray, *5 blue, 1 gray; then for the center stripe, repeat 2 white and 2 gray seven times for a total of 28 threads, then 1 white and 1 gray, then 5 blue at *, and from there in reverse back to the beginning of the warping order. The use of the 2 white and 2 gray in the center makes a very interesting stripe. Other colors could be used in the same way with very excellent effect. Weft is entirely of stockings looped. Men's and boys stockings make a good dark rug.

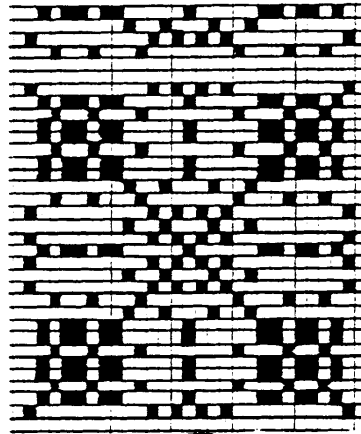
Figure No.2 Striped Rug.



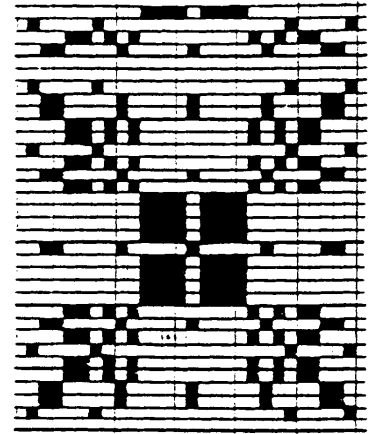
HANDWEAVING NEWS



I.



II.



III.

Designing 4 harness Code Drafts.

In January 1942 and 1943, a method of designing original drafts was given using a code. This has been of much interest to a number of subscribers, and so I am giving more about such drafts in this issue. The above numbers are still available at 45¢ each if anyone wishes to have them, and will help to explain it.

One occupational therapist writes me, that the mental cases which she has had under her care have been particularly fascinated with this. She says that the fact that it is so constructive, and because it can be made a secret between herself and the patient, has made it very valuable. I hope others have found other ways in which it may be used. If so, I would like very much to hear of them.

Codes for the drafting of these patterns may be made up in any fashion which the individual may desire, provided the letters of the alphabet are arranged in four different lines to correspond to the four lines of the four pattern blocks of the loom. The key draft is designed according to the place where the letters of the alphabet occur. By making different arrangements of the letters, different drafts are possible on the same name. The drafts above were written from the three codes as given below, and the name of it, "Johnny Got a Zero", designed by Helen Hill.

Code I.
 1. A E I M Q U Y
 2. B F J N R V Z
 3. C G K O S W
 4. D H L P T X

Code II.
 1. A I Q Y H P X
 2. C K S B J R Z
 3. E M U D L T
 4. G O W F N V

Code III.
 1. W D S H O L M
 2. X C T G P K N
 3. Y B U F Q J
 4. Z A V E R I

Definitions In order to understand what is meant by some of the terms used, it may be well to explain them. Key Draft is the draft written directly from the code letters, using four different lines of cross section paper. Pattern effect, is the design drawn down below the key draft, each pattern block is squared. Of course the same key draft might be drawn down in any other way desired, but this is the one followed here. After the pattern effect has been drawn out, the next thing to do, is to write the threading draft for the loom. We have found it better generally, to follow the order of the pattern effect, rather than that of the key draft when writing the threading draft. In order to get some idea of just how the threading draft will weave, and what it will look like when woven, we draw a check draft below the threading draft. All of the three key drafts above, have skips from 1 to 3, and 2 to 4 or vice versa. So the threading draft, and hence also the check draft or woven effect, will not be exactly the same as the pattern effect drawing.

January 1944

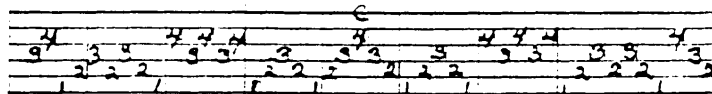
Nellie S. Johnson 12489 Mendota Ave. Detroit 4, Mich.

"Johnny Get a Zero" Threading Drafts.

Code I. No.1-

B One repeat A

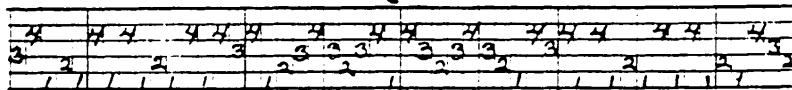
One full repeat of each threading draft is given.Center is marked with a C.



The pattern has not been arranged for a definite number of warp threads, but the order of using the treadles is as follows, - 2&3, 3&4, 4&1, 2&3, 1&2, 3&4, 4&1, 1&2, 2&3, 1&2, 2&3, 3&4. The number of shots of weft to use with the above pattern sheds will depend on the size of the thread used. Weave to square each block, and alternate 1&3 and 2&4 plain weave after each pattern shot as is usual with over-shot weave. The numbers as given above refer to treadles on a loom where the harnesses sink. On a Struoto loom or Jack loom where harnesses rise, use the opposite of the numbers as given above. For 2&3 use 1& 4, for 3&4 use 1&2, for 4&1 use 2&3, for 1&2, use 3&4.

Code II. No.2

B One repeat A

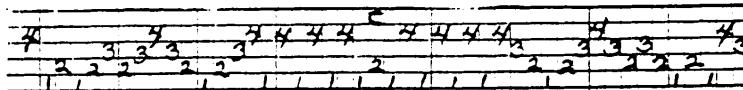


The order of treading this pattern is as follows, - 2&3, 4&1, 1&2, 4&1, 1&2, 4&1, 3&4, 1&2, 2&3, 3&4, 2&3, 4&1, center, reverse back to beginning to complete the pattern. The pattern above at Code No.1 is also just written to the center, reverse it in the same manner when weaving. These pattern threadings all have 2 centers where the pattern reverses or repeats back on itself.

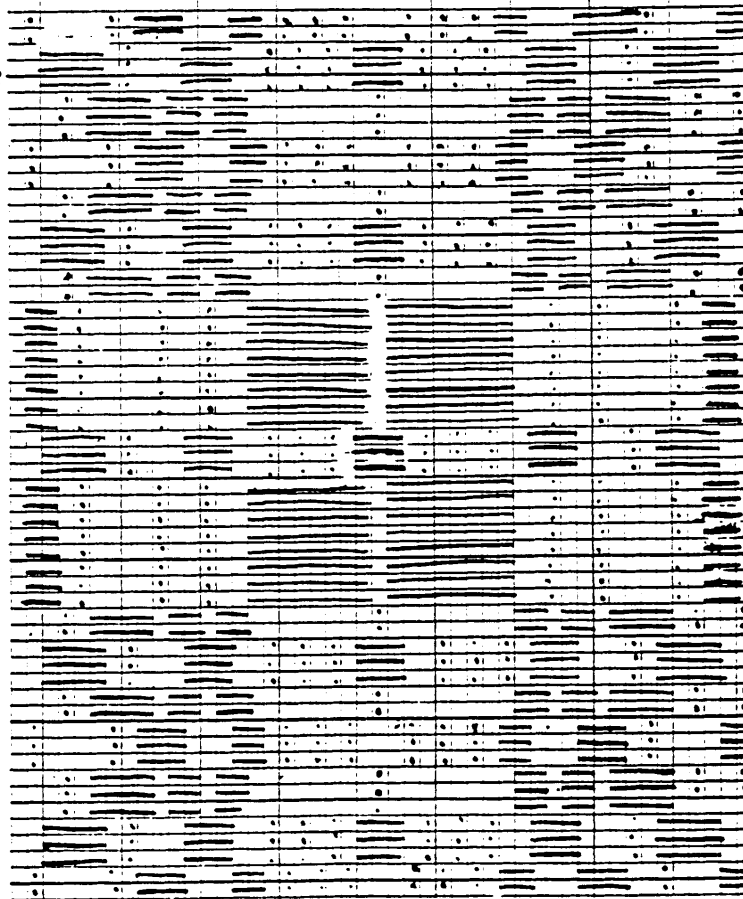
Code LII No.3

B A

One of these is the first block of the threading draft, and the other is the center as marked at C on each of these drafts. It is a help to remember this when planning these threading drafts for the loom.



The pattern threading at No.3 has been drawn down so that the woven effect or check draft may be compared with the pattern effect drawing on Page 1, Code 3.

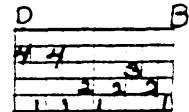
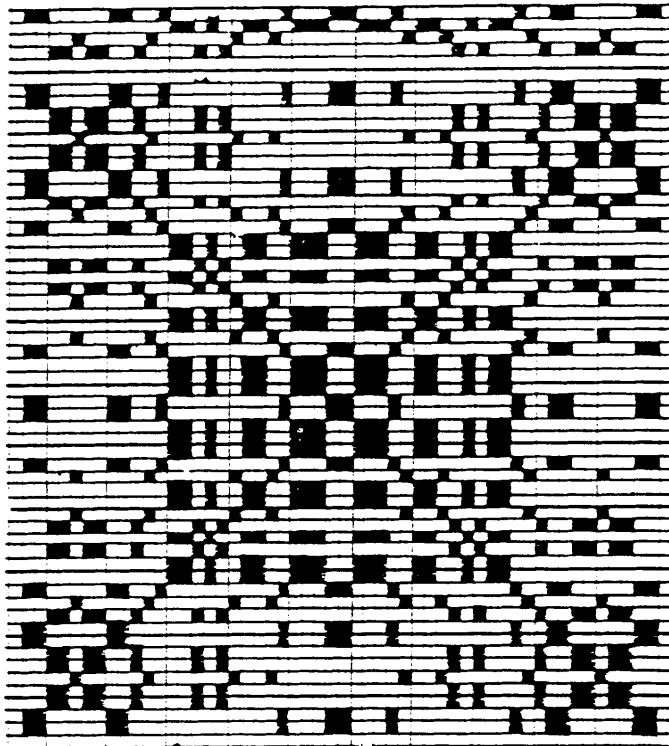
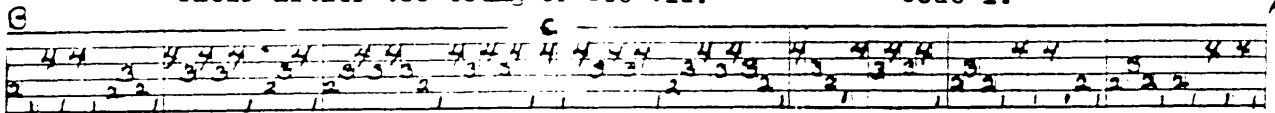


There is a slight difference which will be apparent when these two are compared closely.

If the check drafts are also drawn down for No.1 and No.2, it will be easy to see the slight changes that have to be made in order to write the threading drafts.

On the next page are two more patterns using the same Code plans as given on Page 1, and also based on the words of a popular song, "Their Either Too Young or Too Old."

Such drafts are fun to do, and rather mysterious to the layman.



On the draft above the repeat is from A to B, and B to D for the whole threading, a total of 90 warp threads.

Weave this as follows,

14-4x

12-3x

23-2x

12-3x

14-4x

12-2x

23-2x

14-4x

34-4x

12-2x

34-2x

12-2x

23-2x

34-4x

23-2x

14-2x

34-4x

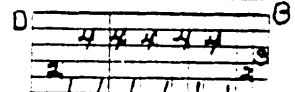
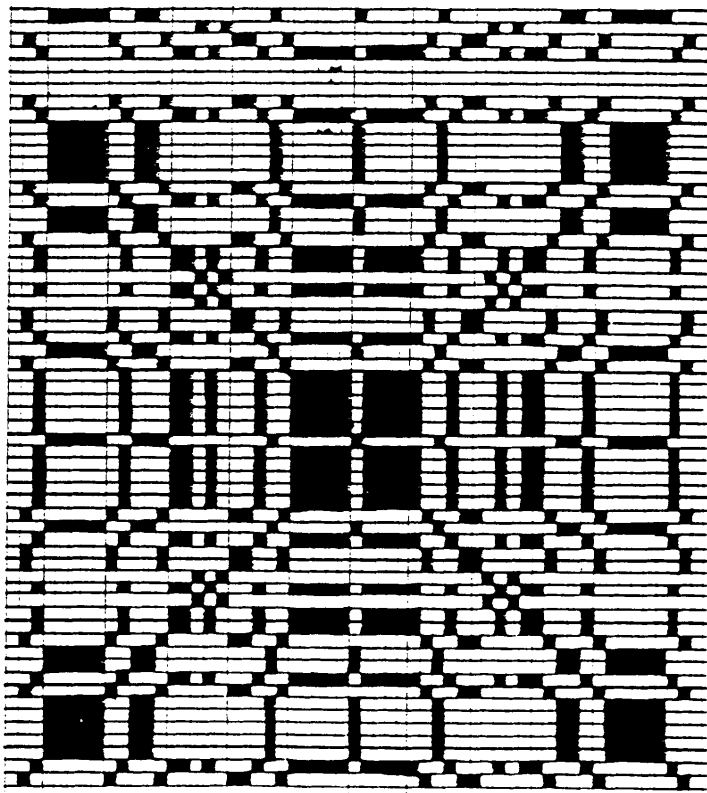
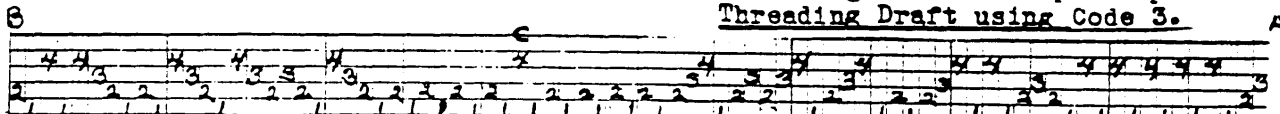
14-4x

(Transpose these directions for Structo or Jack Looms, use just the opposite levers or treadles. These can be used as they are, but pattern will come up on the wrogg side when using a loom where the harnesses rise.)

Use plain weave after each pattern shot, 1&3 or 2&4 alternately.

center, reverse back to beginning for the complete pattern.

Threading Draft using Code 3.



To: weave the pattern of Code 3. proceed as follows,-

23-2x

12-2x,

14-10x

23-2x

12-2x

14-3x

23-2x

12-3x

34-2x

12-2x

34-2x

23-3x

12-2x

14-2x

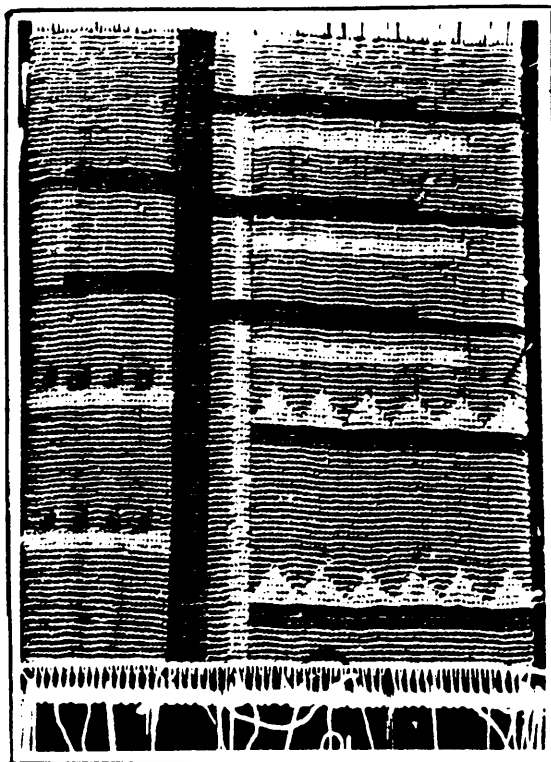
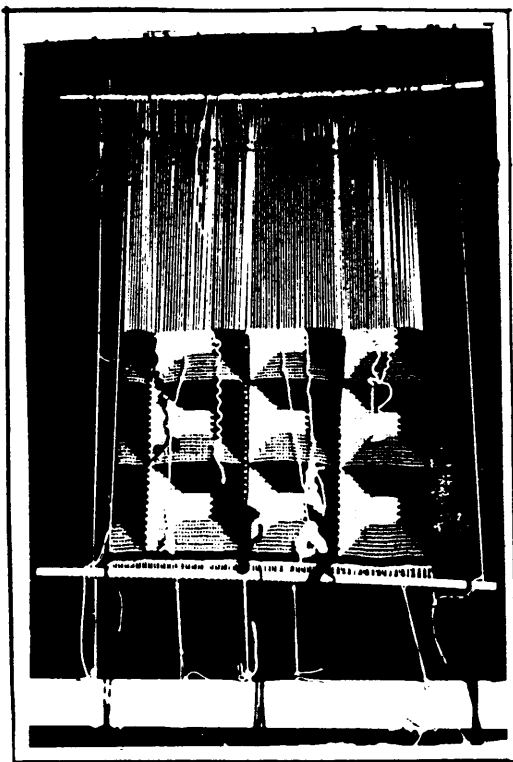
23-2x

12-9x

14-3x

center, repeat back to the beginning for complete pattern.

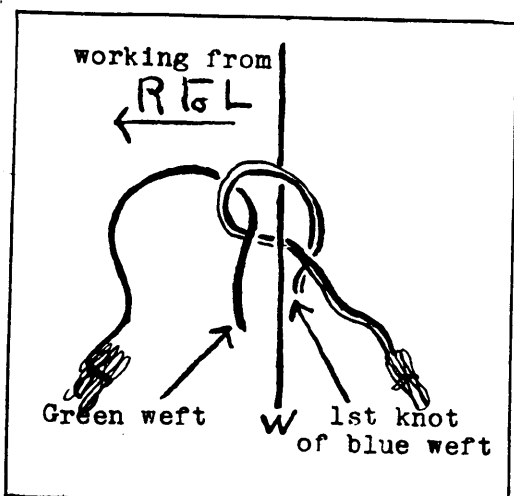
HANDWEAVING NEWS



Greek Soumak - A new method of Interlocking Verticals.

The technique of Greek Soumak knot is an interesting form of weaving which requires only a stiff frame of some sort, as an old picture frame or hooked rug frame. Detailed directions of how to set this up and the technique of how to make the knot were given in detail in Sept and October 1938 Handweaving News, and will not be repeated here, as many of you already have these copies. For those who have not, I still have these available at 45¢ each.

The geometrical design on the left above shows the setup and design partly finished. This was woven by Margaret Lover, and the one on the right was designed and woven by Ruth Foster, both students of mine. The purpose of this News is to show how to prevent the serrated effect, as will be easily seen in the verticals of the left hand design above, caused by the meeting and joining of two colors. Note that in Miss Foster's design there is no serrated effect, even though the verticals go the full length of the design.

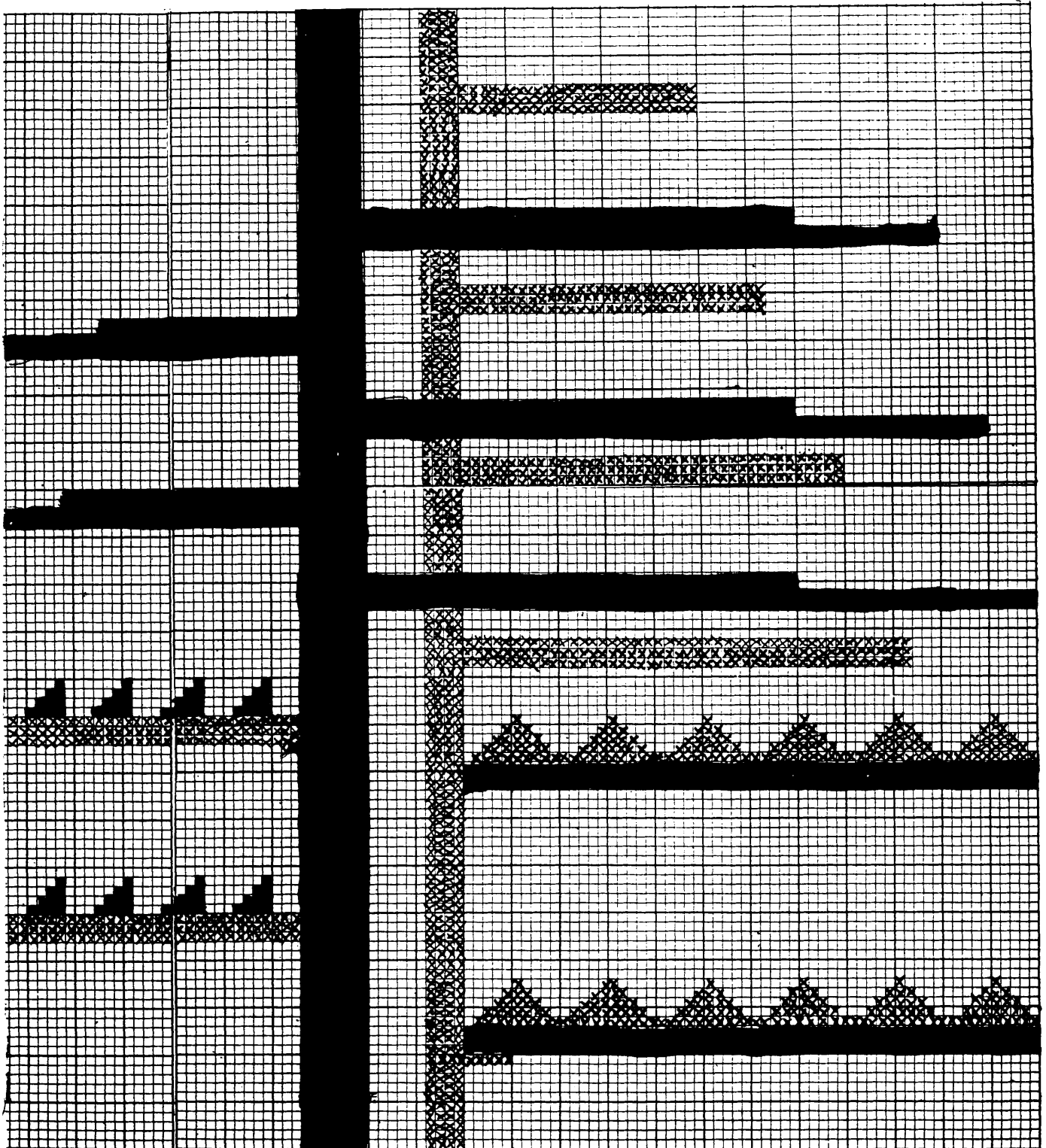


How to Join Wefts so the interlocking does not show or leave a slit.

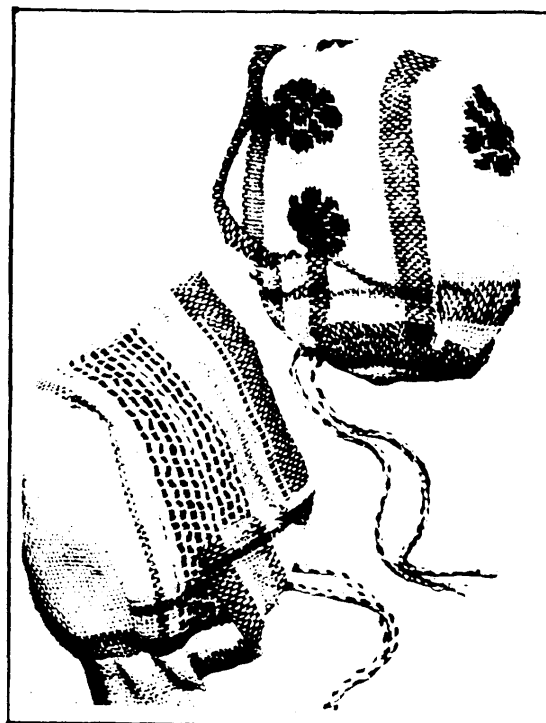
These directions are given for the method of making three knots on each warp thread. Working from right to left, at the first knot on the warp thread where the blue weft color ends, pull the green weft thread through the loop of blue as shown. Hold this green weft bobbin to the left of the blue knot. Tie the two remaining knots of blue weft. Pull the green weft tight, and tie the three green knots on the next warp thread. Continue until you meet the next color, then knot in the same way, from the right to left side of the loom. When working from left to right, hold the new weft color to the right of the last knot of the ending color, but tie in the same way as described above. We wish to express our thanks to Miss Foster and Miss Dietz for this improved way of working.

Design of Miss Foster's Weaving as shown on Page 1.

This design is an abstraction of bare branches of trees, mountains in the distance on the right, and small sail boats on the left, as seen through the trees. You can use your imagination on this, but it was a very attractive wall hanging. It was woven of tapestry wools. The black on the design the darkest shade of blue, the white a middle blue, and the X's all with a light gray green. Any other color arrangement can be used as desired. Miss Lover's design was woven for a foot stool cover, in shades of tan, yellow, and dark brown.



HANDWEAVING NEWS



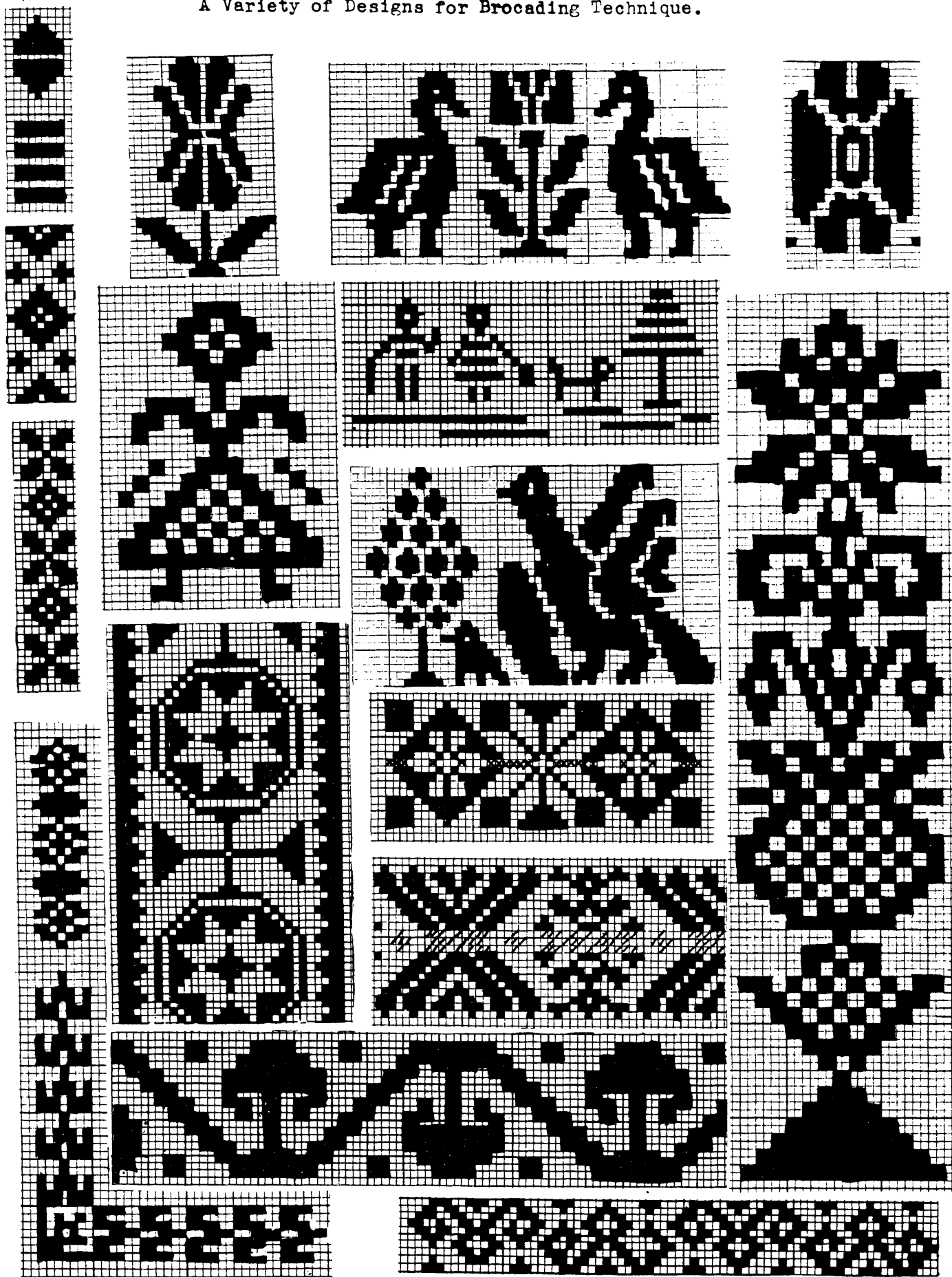
Brocaded Caps and Jacket.

There seems to be a good deal of interest in knowing how brocade technique may be used for the decoration of garments. And so this month, I am going to try and show what some of my students have done with these. The above articles are both of all wool for the warp and weft. The white jacket woven by Edythe Cusick was woven of fine angora, and brocaded also with angora, somewhat coarser. The caps were woven of Shetland yarn. Both of these were woven on the heddle loom or the Hearthside loom. The jacket was brocaded with rose and green, while the caps were of vary colored yarns mostly very bright colors. These caps were woven square, and folded as the bonnets were folded in the broomstick loom directions of July 1941. But instead a 12" wide strip may be woven, and sewed up the back and pulled in at the neck with small box pleats if desired.

On the next page are a number of different borders and figures, any of which can be suited to the article to be woven. Vests in either a dark color, green, black or blue, may be brocaded with bright reds, greens, yellows, blues, and the red purples. For these use a narrow stripe design, followed by some plain weave of the background color, then use a design of figures, as birds etc. Some of the magazines have shown some of these vests lately as well as bordered dresses etc. Harpers Bazaar and Vogue have had illustrations of these. Also in the last number of Forecast Magazine is an excellent bordered dress made after McCall Pattern No. 5538. Bags, hats, fasciators, head scarves, neck scarves etc. can all be brocaded with these designs, and in many different ways and colors that are most attractive and individual.

Method of Brocading has been given in a number of the Handweaving News, and also in the booklet "Weaving on the Hearthside Loom". It consists of picking up a row of warp threads, over and under, according to the pattern, with the weft shuttle. Then this row is followed by a row of the plain weave. Then another picked up row and so on.

A Variety of Designs for Brocading Technique.



To Weave separate figures as for instance a yellow bird and a green tree, carry the yellow pattern weft color only as far as it is needed, then push it below the warp threads. Leave it and continue at the point where the green is needed. Carry this as far as it goes, push it below the warp threads and so on across the width of the pattern to be picked up. Then put in a row of plain weave all width of the loom. Now bring up the colors from below the warp threads at the point where the next part of that color begins again. There will be some weft skips on the back, but that cannot be helped. The weft pattern thread should always be heavier than that used for the plain weave shots.

To break up a long weft pattern skip. Often in some of the figures, there are very long weft skips, too long to be practical. When these occur, they can be broken up by going under one warp thread every once in awhile at regular intervals. Sometimes this would only need to be in the center of the skip, at others it might be necessary to break it twice or even three times. This is described in detail in Handweaving News for January 1941.

For those who have a loom which weaves finer than the heddle, it is possible to weave finer materials set at 30 or 24 threads to the inch. For this sort of weaving, one may use all cotton for warp and weft, all wool if you can get it, or wool only for the brocading using a warp of cotton. When using all cotton for this, the strand cottons are nice to use for the brocading pattern weft.

Tie-up Simple Threading Drafts to Use on a 4 harness loom.

1	2	3	4	A	B
		4	4	4	
3	3			3	4
2	2				2

IV										
		4	4	4	4	4	3	3	2	2
2	2	3	3							

III			
	4	4	
2	3	3	2

II			
	4	4	
2	3	3	2

I	
4	3
2	1

The threading drafts above are variations of twill; No. I is twill; No. II Herring-bone; Rosepath; and the simple diamond which is the same as No. III except that the blocks are larger skips. The tie-up is the regular four harness tie-up. These threadings can be used for simple borders, and can be woven in any combination of bright colors that may be desired. Between these borders, small figures can be picked up in the brocaded technique, following the cross section paper patterns as given on Page 2. I hope this material will prove of interest and help.

A few Announcements which may be of interest.

Two small books which weavers may like to own, -

"Vegetable Dyes, Make Your Own, from Barks, Weeds, Berries, Fruit" by Douglas Leechman. published by Oxford University Press, Toronto, Canada. Cost 35¢.

This book contains a number of simple recipes for vegetable dyeing. Its purpose is to give the beginner who wishes to dye wools with vegetable dyes, some simple methods of doing it. One basic recipe is given, alum is used as a mordant, and only the common easily obtainable plants are used.

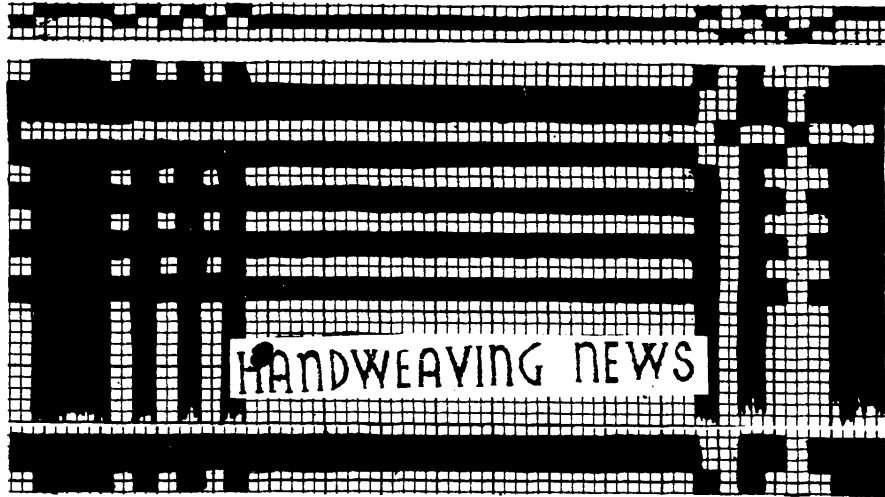
"Home-craft Course in Pennsylvania Dutch Home Weaving Patterns" by Mrs. Marguerite P. Davison. Volume IV. can be purchased from Mrs. C. Naaman Keyser, Plymouth Meeting, Pa. Price \$1.00

This little book contains a number of the ancient drafts from some of the books on weaving contained in the Pennsylvania Museum. Those who enjoy using small over-shot patterns will find these of interest.

Many of you have probably noticed that for several months I have been sending out two months of Handweaving News at once. This is to save paper as well as time, since help has also been hard to find in this war production center. I want to take this opportunity to again thank all those of you who have been sending in new subscriptions thus helping me to increase the usefulness of this instruction leaflet. Write me when you have news of interest, and for information you would like to have in the News too.

Nellie Sargent Johnson

April 1944. Nellie Sargent Johnson 12489 Mendota Ave. Detroit 4, Mich.

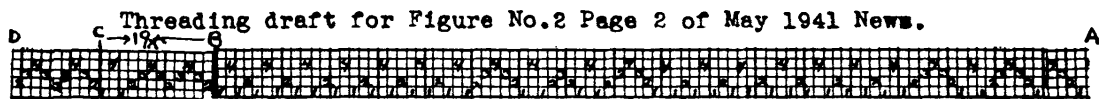


"Crackle" Weave Patterns.

Patterns in "Crackle" weave have always been popular. This is probably due to the fact that they are adaptable to modern effects, and also offer much variety in the weaving. For the benefit of recent News subscribers, I will give a brief summary of previous issues and what they have contained about this interesting weave.

In February 1940, the origin of the weave is discussed and its characteristics. The units of the weave are given, and full instruction as to how to write these threading drafts for the four harness loom based on the twill idea. Explanation of the tie-up and treading of these patterns is also given. This issue really forms the basis for designing your own drafts for this weave. It is still available. Again in November of 1940 issue, more crackle weave tree patterns were sent out. These were adaptations of some of the old drawings given in the "Scheelein" book from the Pennsylvania Museum. The method of using a three block key draft was described, and three large patterns in this weave suitable for rugs, coverlets, couch covers, or large table covers were given. Also the method of designing a tree border, when only the center repeat of the pattern is shown, as was the case with some of these old drawings.

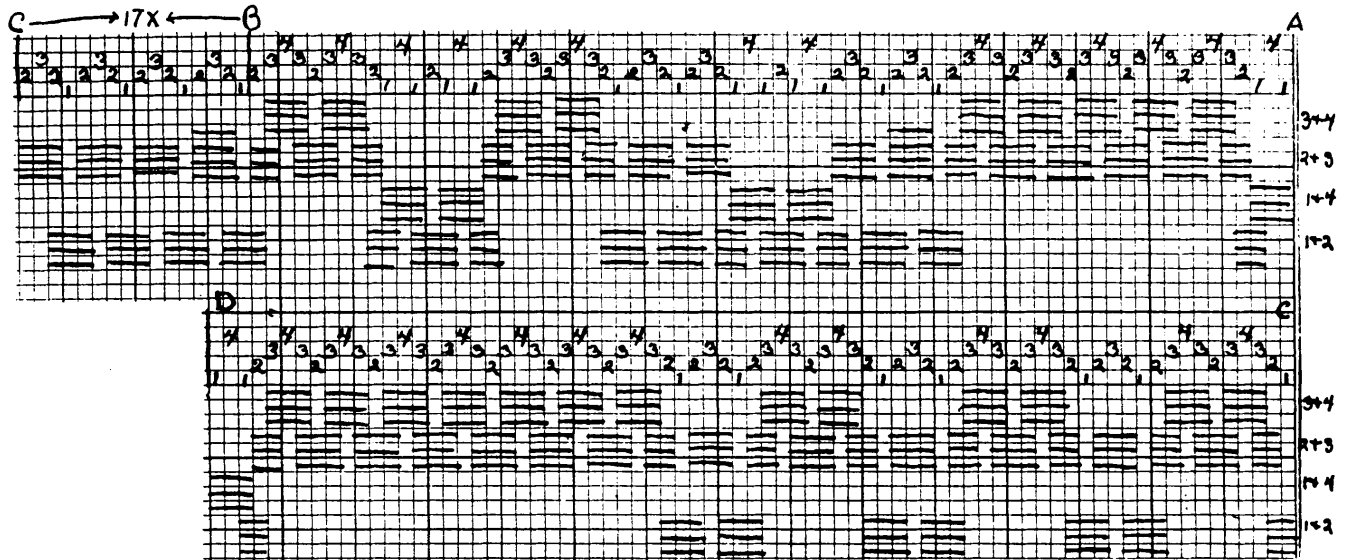
The May 1941 issue contains several threading drafts which have been very successfully used by News subscribers for luncheon sets etc. I wish however to correct the threading draft for Figure No. 2, Page 2 of this copy. I regret that this mistake occurred, the correct draft and arrangement is given below.



Arrangement of this threading draft for a warp of 420 threads follows. Thread the first heddle double, then from A to B - 91 threads, B to C 12, repeat this 19x for center. C to D is 9 threads, then B to A for end border.

The News for April 1943 contained a useful border pattern for towels, luncheon sets etc. Also two patterns for luncheon sets, chair back sets etc. And different ways of weaving these crackle weave pattern drafts were given; five ways in all. Recently we have woven Pattern No. 1 on Page 3 on a yellow warp set 30 to the inch for a luncheon set place mat with very modern effect. Weft used over this was a dark grey No. 20 linen, we happened to have from pre-war days, for the pattern, and a fine glistening white rayon thread for the plain weave. The napkin was of plain weave alternating the linen and the rayon thread, with just a narrow border on each end woven on 3&4, repeated for about one half inch. The effect was subtle, and looked almost as if it had been "laid-in". A good use of this pattern.

Threading Draft for Pattern No.1 Key draft on Page 1.



The woven pattern effect has been drawn out below the threading draft above to show what it looks like when woven. Figures on right indicate the tie-up. Note that on the Strueto loom, the opposite numbers should be used for the levers, - as 1&2 for 3&4. 2&3 for 1&4, 1&4 for 2&3, and 3&4 for 1&2, or on any loom where harnesses rise. Toput this pattern on a warp of 420 threads, proceed to thread as follows, - Thread the first double. From A to B is 73 threads, B to C is 16 threads, repeat 17x - 272 threads. Then C to D - 75 threads for the end. Weave this to follow the effect on Page 1. This is an unbalanced pattern with no repeat in the threading draft, and gives a modern effect which many of you have asked for. I hope you will use it and like it, we do.

Threading Draft for Pattern No.2 Figure No.2

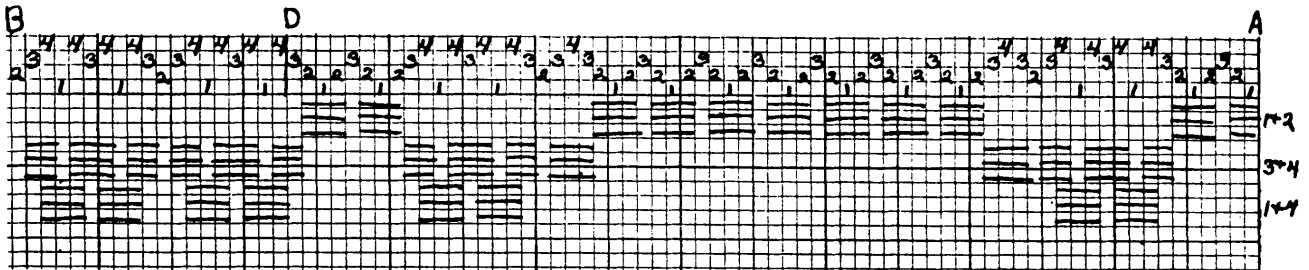
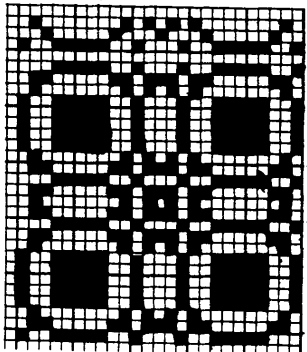


Figure No.2
Key Draft and Pattern effect.

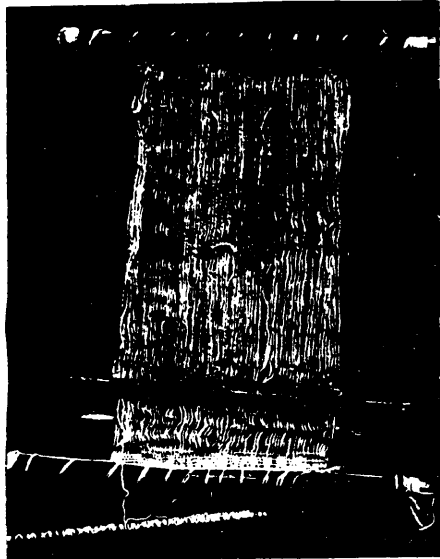


This pattern is a useful one for an all over pattern. It can be used for upholstery, towel or luncheon set borders and in many other ways.

To arrange this for a warp of 600 threads proceed as follows, Thread 412341232=9 threads, then begin at A and repeat from A to B six times which is 86 x 6 or 516 threads. Now thread A to D - 67 threads. End with 21432141.

All of the News mentioned on Page 1 are available at 45¢ each. This makes a very complete set of useful crackle weave pattern drafts. If you wish definite information on any phase or problem of weaving, write me. I try to include in the News material for which I have requests, as is the case in this issue

HANDWEAVING NEWS



Primitive or Picture Frame Loom.

It was in July of 1936 News that I first described the simple primitive loom, or the picture frame loom. With the interest in equipment for use in rehabilitation work so much in demand, I have had a number of requests for this material. And as this first issue is now out of print, I am giving here the directions which we have found useful in the adaptation of this loom for modern use.

The picture frame loom is made on the same principles as the primitive Ancient Peruvian Loom from my collection, which is shown above at Figure No.1. At Figure No.2 is the modern picture frame loom set up to weave as we use it. There are other ways in which it may be put together, but this has been used with success in many of my own classes, and is described as we have made it.

Equipment necessary for a Picture Frame Loom.

1. A good strong wood frame 24" x 30", or a hooked rug frame, or even curtain stretchers have been used in my own classes for large pieces.
2. Three dowel rods $\frac{1}{2}$ " diameter and 18" long, for the 24" x 30" frame above. Mark two of these rods off in quarter inches for its length. This helps to space the warp threads easily as they are put on. Tie these rods to the frame, as at Figure No.3, at A, B, C, and D; E, F. Then tie the rods together at G and H. Be sure both rods are straight and parallel to the ends of the wood frame.

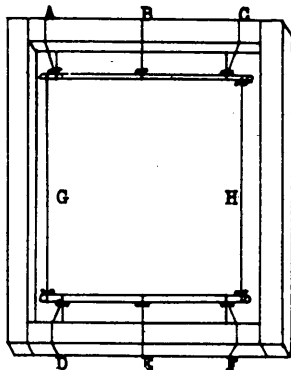


Figure No.3

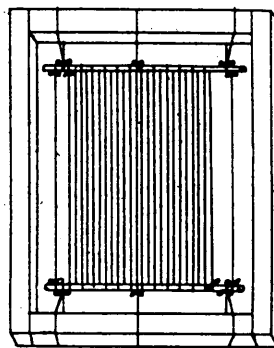
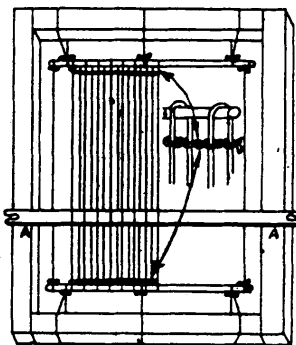


Figure No.4

3. For the first attempt it is best not to try to set up the loom with more than about ten inches of warp. Use carpet warp or any coarse warp for this. Tie the end of the warp to the upper dowel rod on the left about 5" from the center. Bring the warp spool down and over the lower rod, under it between the rod and the frame, up and over the top rod between it and the frame, and down to the lower rod and over and under it again. Repeat for desired width. Space the thread with the fingers as it is put on, so there will be about 6 to 8 to the inch.

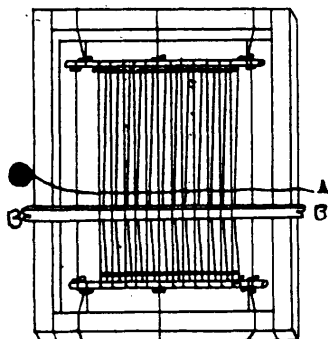
No. 5



3. (putting on the warp continued) When the total amount of the warp has been wound on, tie the end of it loosely to the dowel rod. Then go carefully over the width of the warp to make sure all of the threads are as even in tension as possible. If they are not even, pull them up until they are, for the tension must be the same throughout. Then tie the last warp tightly to the dowel rod on which it ends, as at Figure No. 4

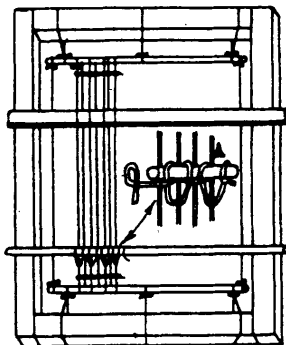
4. Now it will be seen that there is a crossing of the warp threads so that it is possible to separate them into two groups with the fingers. Pass a flat shed stick through this shed as at AA of Figure No. 5. Tie this stick loosely to the sides of the frame so it can turn easily but cannot slip out of the shed.

No. 6



5. Spacing the Warp threads, detail of this at Figure No. 5. In order to have the warp threads equidistant, proceed as follows, - Take a piece of thread or yarn that is to be used for the weft, a little more than twice the width of the warp on the loom. Divide its length ~~in~~ two, and at the center, loop it around the first warp thread on the left. Twist it once, twice or three times, according to the space between each warp thread. When the twisting is complete, tie the ends of the spacing threads to the edge cords. Repeat the same operation on the opposite end of the warp in the same way.

No. 7



6. The next step is to tie the 3rd dowel rod with loops of cord to the warp threads. These loops are called heddles, and the rod, the heddle rod. To do this, take another flat stick or shuttle, and with it, pick up just the opposite warp threads from those on the first stick put in AA. Call this second pick up stick BB. Turn it on edge after all of the threads have been picked up on it.

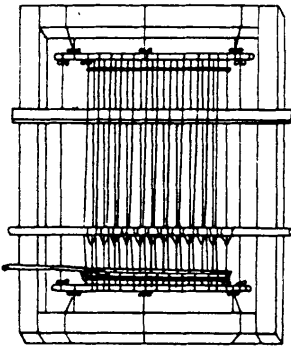
7. Tie the end of a blue carpet warp ball to the end of the 3rd dowel rod and pass it through the shed made by the shed stick BB, from left to A, as in Figure No. 8, leaving the ball at the left side, and loose. With the heddle rod in the right hand, pick up a loop of the blue thread with the left hand between the first and second warp threads. Make a loop with this, twist it to the right, slip over the end of the dowel rod and pull up tight on the dowel rod, holding in place with the first finger of the right hand. Hold the rod high enough above the warp so the loops of the blue thread are about $1\frac{1}{2}$ inches long. Twist another loop of the blue thread to the left and pull this up tight on the rod. Reach down through the warp threads and pick up another loop of blue thread between the 2nd and 3rd warp threads. Twist this to the right, pull up tight on the rod, make another loop, twist to the left, and pull up tight. Continue for the width of the warp. Detail of this shown at Figure 7. These loops of the blue thread need to be kept the same length. At Figure No. 8 is shown an extra flat stick on top of the warp threads, above the flat stick BB. This is used to gauge the width of the blue loops, is a help to keep them even, and can be used or not as desired. I hope this photo will be clear enough to show how the knot is made on the heddle rod.

No. 8



When the blue loops are all tied to the heddle rod, tie the end of the blue thread securely to the rod, and pull out the flat stick BB, used to hold up the warps which were tied to the heddle rod with blue loops. Now if the stick AA is turned on edge, one group of warp is raised. While if the heddle rod is pulled up, the other set of warp threads are raised.

Figure No.9



Plain weaving on the picture frame loom. The loom is now ready to weave, with the flat stick AA tied in and the heddle rod tied up to the warp threads. The weft thread can be wound on a shuttle if it is to go the full width of the loom, or in small bobbins as at Figure No. 10 if it is to be used for a tapestry. A coarse comb or smooth flat stick, often called a weaving sword, can be used to push each weft row into place after the row has been put through the shed all the way across the width of the loom. The queer looking fork shaped object in Figure No.10 is a wooden tool, also used by the Indians to push weft threads into place. One more useful tool is a small stick the width of the warp threads, with a small sharp nail driven in at each end on a slant. This can serve as a template, or tool to keep the weaving edges straight. It is inserted at the back of the weaving, and moved as the weaving progresses.

Beginning to Weave. When beginning, turn the end of the weft thread around the edge warp thread, and carry it through the shed made by turning the flat stick AA on edge. Put it into the shed on a sharp slant. Push it into place with the comb starting at the closest part of the slant to the twisting threads, for the width of the warp. Turn down the flat stick AA, pull up the heddle rod, and put in this shed, another flat stick BB or shuttle to hold the warp threads up so the next row of weft may be put in this shed. Carry the weft across the width of the loom in this shed. Push into place with the comb or weaving sword. This completes two rows of plain weaving. It is often called tabby.

Difficulties to be overcome in the Use of Loom.

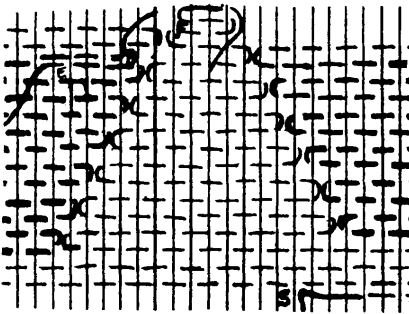
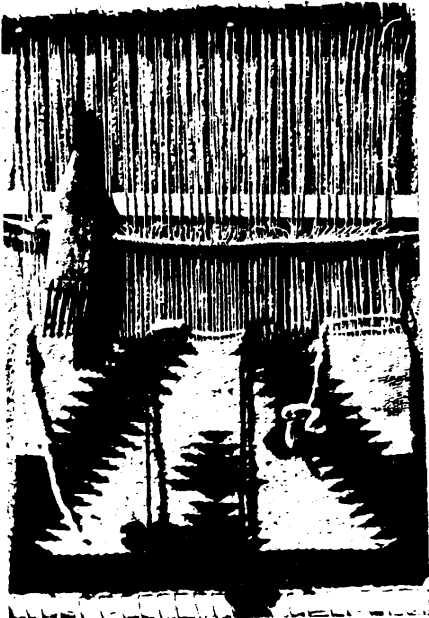


Figure No.10

This is a simple tool, and does require skill and patience to learn how to use it well. The beginner may have trouble with edges pulled in too much. This can be helped in several ways. First, be sure the warp threads are strung on the loom evenly. Loose threads in one place and tight in another make it difficult to beat down the weft easily. Space the warp evenly, do not let it bunch together. Center warp threads often do this, while the edge threads seem to work further apart than they should be. The template described above helps to correct this. Another point which seems to aid in keeping a straight edge is to carry the weft only through a small number of weft threads at a time, beat it into place, then carry it a few threads further on, beat down and so on for the width of the weaving.



Possibilities of the Picture Frame Loom. Limited only by the patience and skill of the weaver. Some of the finest and most beautiful textiles in the world have been woven on a loom no more complicated than this one. All of the lovely ancient Peruvian fabrics were done on a loom of this same type. It is possible to weave with many different kinds of threads and yarns, fine as well as coarse. Also many different kinds of technique may be used. Tapestry in all of its forms, one of the Indian rug tapestries shown at the left with the detail is shown above. Knot Techniques, brocading, gauze weave, spanish weave etc. can all be used. And with the addition of extra shed sticks and heddle rods, twills and loom controlled patterns may be woven.

The method of using this type of loom for the Greek Soumak knot has already been described. This type of weaving deserves much wider use, as it is thoroughly practical, provided one is willing to learn how to use it, and it costs but little.

Handweaving News

Figure No.1 Two block Design.

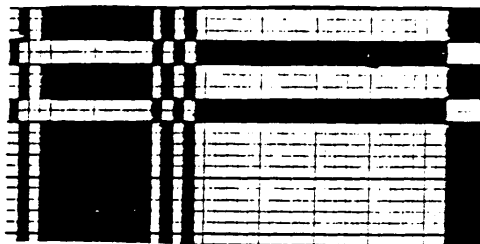


Figure No.2 Another arrangement.

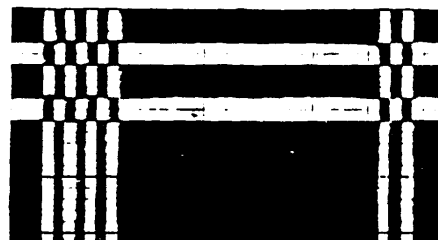


Figure No.3 Full size Key Draft for Designs above.



Modern Two Block Over-shot patterns.

Doubtless you have heard the idea expressed that modern effects could not be obtained with the texture of Colonial Over-shot patterns. But here it is, and fairly successful in the adaptation, it seems to me. This material is based on the work of one of my students, Loretta Loughney, during this past spring. We hope you will find it of interest.

Figure No.1 above is a design for a full size place mat. The key draft for this two block pattern is shown just at the left of the Figure. The pattern draft is planned for a warp of 420 threads, set at 30 threads to the inch, or 2 threads in each dent of a 15 dent reed. Directions for the weaving of all of these patterns are given for the levers of the Structo looms. For a treadle loom where the harnesses sink, transpose these directions. At Figure No.2 is shown another design from the same threading and key draft as No.1. And of course many other arrangements are also possible from this same draft.

The key draft at the left of Figure No.1 has only half of the units, in order to make the design take up less space. The full key draft for this threading draft is shown at Figure No. 3 and the threading draft for the loom is given at Figure No.4. The pattern or woven effect of the blocks is written out below the threading draft, and the numbers at the right of the woven effect are the numbers of the Structo loom levers that are used for the weaving. These levers are used over and over as required for the pattern design as shown at Figure No.1 or No.2, as desired.

<u>To arrange the pattern threading in the loom.</u>		
Thread from A to B - 98 threads	x 2	196
Then " B to C - 10 "	x 22	220
At end thread 1,2,1,2, to use up resf		4
	Total	420

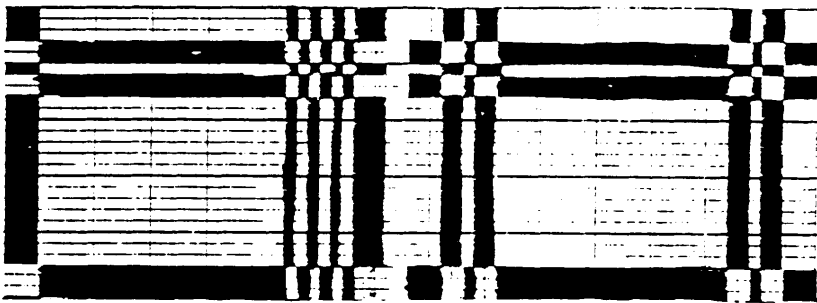
To weave use the levers enough times, with plain weave between each pattern shot, to make the dark areas as shown on the Design at Figure No.1 and 2. This makes an over-shot skip 9 threads long, under one thread, then another skip.

Figure No.4 Threading Draft for Key Draft of Figure No.1 and 2 above.



Materials used for this weaving. Warp 20/2 mercerized cotton, set 32 threads to the inch. Tabby thread or plain weave weft is of aqua color No. 1449, size 20. Pattern weft is of two threads wound on the same shuttle, one of these a fine white rayon, and the other Cream color No. 1402 size No. 5 mercerized cotton. Alternate one shot of the pattern and one shot of the tabby thread throughout. Repeat the pattern blocks so the effect is as is the design of either Figure No. 1 or 2.

Figure No. 5 and Figure No. 6 . Designs for another Key Draft.



To thread Figure No. 8.
 A G B = 16 threads x 3 = 48
 B G C = 16 " " x 2 = 32
 C G D = 14 " " once = 14
 D G E = 16 " " x 2 = 32
 E G F = 16 " " x 14 = 224
 Thread E G Face out
 omit last thread on
 harness 2 = 15
 F G G = 16 Threads x 3 = 48
 End = 7 threads once = 7
 Total 420 Threads

Figure No. 7 Full size Key Draft for Patterns at No. 6 and 7

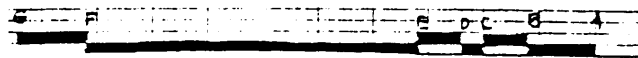
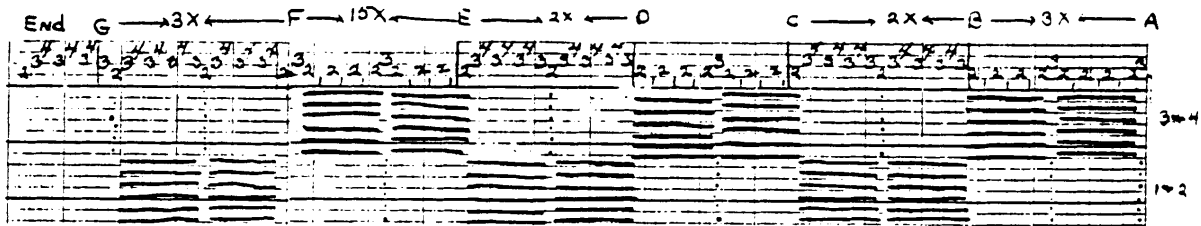


Figure No. 8 Threading Draft for Key Draft of Patterns No. 6 and 7.



The pattern design at No. 5 is somewhat better than the one at No. 6, in that it is a bit more unusual. Though many of you may prefer to do the one at No. 8. Also note the fact that this key draft has a 3 unit pattern block at the end of the threading which makes it possible to put a bottom border on the place mat. This may be omitted, and the threading made the same as in Figure No. 1 if desired. There are many other woven effects possible which you may enjoy working out on cross section paper, and then weaving, with this kind of a design pattern.

Also note that in the threading draft at No. 8, the pattern skip length has been shortened by two threads, and is 7 threads long, while the pattern skip length in pattern threading at Figure No. 4 is 9 threads long. It is possible also to write this block using 5 threads or even 11 threads long. Mrs. Florence Bratten named this sort of a draft, 5 and 1 threading, 7 and 1 threading, 9 and 1 threading etc. Though she did not write these threadings to use them in the manner that we have here. I shall be interested to have anyone write me if they have ever seen over-shot used in this manner before. I believe this is one of the new things which the News will bring to you this year. Many people do enjoy weaving the over-shot texture and I shall hope to hear from any of you that try out this new way of weaving it.

It is possible to weave these two block designs in "Summer and Winter", M's and O's, Bronson weave etc. I have prepared lessons on Draft Writing for any of those of you who may wish to learn how to do this. Such lessons with woven examples are \$3.50 each, including loan of the samples for two weeks of study.

Many of you have written me about your work with the Arts and Skills Units of the American Red Cross. I am preparing a News on this subject. Will all those who are in this work, please write and tell me all about what you are teaching etc. Others are very much interested and wish to know about it.

July 1944

Hellie Sargent Johnson 10489 Mendota Ave. Detroit 4, Mich.

HANDWEAVING NEWS



Figure No.1

Handwoven Hats

The hats sketched for you in this issue of Handweaving News were designed and woven by Elsa Koskinen, one of the students in my class at Wayne University during this past spring. They are interesting for several reasons. They were definitely designed for the person who was to wear them, the millinery workmanship and finishing technique was excellent, and the handwoven material carried out the idea further by being adapted to the type of hat for which it was used.

In planning out a design for anything, the designer should know his tool, his material, and the techniques with which he carries out his ideas. You cannot create until you have ideas and imagination, but you must also have the mastery

of the tool, materials, and the techniques. This will apply to any craft or hand skill, whether it be weaving, pottery, metalcraft, sewing, or millinery. The handweaving of these hats was very simple and easy to do, but the hats were smart because they were well designed, the style was suited to the type of material used, and the millinery technique was so excellent that it looked very professional.



Figure No.2

All of these hats can be woven on the Hearthside loom, and of course also on any other loom. The large hat at the top of this page was woven on a lemon yellow carpet warp. The weft was of the same material, except that a thread of No.20 yellow-green mercerized cotton was used with the carpet warp and natural color corn shucks were laid into the same shed in a hit and miss fashion. This is a rather new idea for millinery, but gave an interesting rough straw like material very well suited to the kind of hat. This hat was shaped over a large salad bowl to obtain its shape, and lined inside with pale yellow-green material. A pair of wooden sole sandals with the same woven material for the top, and strings of yellow corded carpet warp, were made to go with the hat.

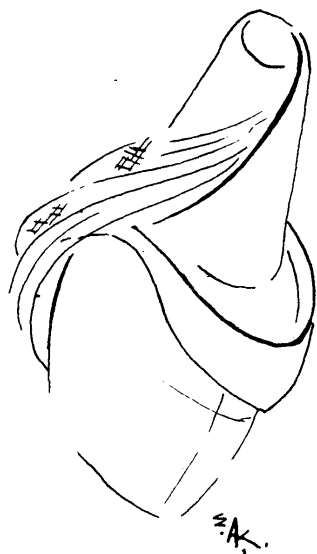


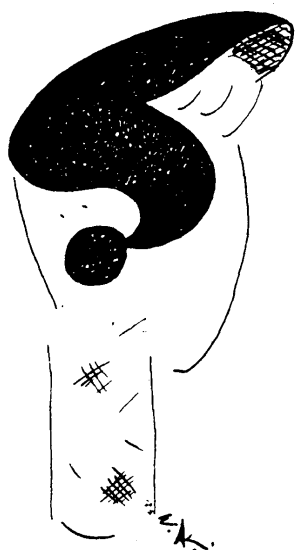
Figure No.3

At Figure No.2 at the bottom of Page 1 is a black pill box type of hat created in the mandarin mood. This was woven on a black warp with a nubby rayon material for the weft. This was used double so as to give body to the fabric. This is called the "Career Girl" hat. All around the turned up brim are letters cut from white felt. These stenographic hieroglyphics mean, "Life's deepest joy springs from work". A rather unique idea for a hat, isn't it. But it shows ideas and imagination too.

The hat at Figure No.3 was woven on white carpet warp with double white weft of rough rayon material. It was made up on a special shape with the brim turned up on the front. The crown was coiled like a funnel and open at the top of the hat. Out of this opening came two shades of veiling, one pale grey and the other pale dark yellow green. Blended together these two colors toned into the grey facing on the inside of the hat. This was the first hat which Miss Koskinen tried out with her handwoven material. I might also say that oddly enough she was graduated from Wayne University with a degree in Business Administration, and is now working toward her Master's degree in Fine Arts.

At Figure No.4 below is the question mark shaped "Leap Year" or 1944 hat. This hat has no crown and is flat on top. It is held on the head with one of the small combs available now, and a pin on the end of the question mark in the back. It was woven of brownwool material on a carpet warp, and is plain tabby weaving throughout.

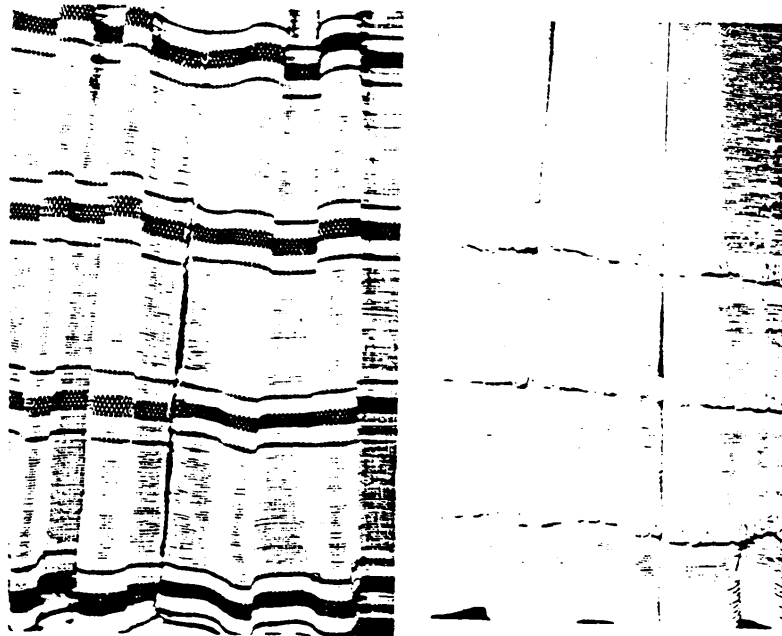
All of these hats together with several more were displayed at the Annual Art Exhibit of Wayne University at the Detroit Art Institute June 1 to 6th, and created considerable interest and comment, and I thought that Handweaving News subscribers would be also interested in having me describe them. Has anyone else tried making handwoven hats? There is a very large field for this kind of weaving it seems to me. And the possibilities are limitless.



The models on which the hats were displayed were also of unusual character. A simple egg shaped head form was made of clay. From this a plaster of paris mold was made in two parts. Then strips from the newspaper want ad section were cut about an inch wide, and pasted inside with decorator's paste, until the inside was about a quarter of an inch thick. Then this was dried out in a slow oven, and the mold removed, and the two halves stuck together to form the shape. The neck was formed on a large can, and when dry attached to the head form. Eye lashes and mouth were added cut from red felt. Asbestos and water made into a paste, may also be made into a head form in the same way, with half curls cut out of bias strips of burlap. The head forms are easy to make and serve as good models on which to display hats.

Quite a number of people have asked me if I am having classes in weaving during the summer at Wayne University this year. I am not having any classes this summer, but will suggest that those of you who wish to do some extra work, subscribe for some of the special weaving lessons which I have written. Cost with loan of samples \$3.50.

HANDWEAVING NEWS



Some Ideas for Christmas Weaving.

Recently a number of people have written me asking for ideas for Christmas weaving. Surely this year they should be good practical gifts, so I will try to give some suggestions for the whole family.

The curtains above were woven on the Hearthside loom and are practical easy to make and most attractive. The one on the left is just striped in color at regular intervals, very easy and simple to make.

Use Home-craft Softcotton for the color stripes with cream color for the single shots. These stripes may be arranged about 6" apart or any distance desired. The curtain on the right was woven on carpet warp with a double weft of lemon yellow carpet warp and stripes of cream Home-craft soft cotton. Three inch spaces of warp were left unweaved, and stitched on each side, then stitched together to form the fringe after the curtain was removed from the loom. A rug of grey, black and lemon yellow to go with these makes a good bathroom combination. In weaving the rug, use just a little of the yellow and black with the largest amount of grey.

Place Mats for luncheon sets. are always acceptable. And we have found the ones made of corn shucks very attractive and serviceable. One of our newest ones was woven by Mrs. Kenneth Spalding. She used warp of deep peach color with weft of henna or rust thread, laying the short lengths of corn shuck in at hit and miss intervals. Ends of these were hemmed.

Another place mat woven by Joy Connor was made on a carpet warp white of cream, with weft of grey, brown, lemon-yellow, and tan wound on one shuttle, and yellow Home-craft cotton for the other weft. Weave this as follows,- 12 rows of plain weave with the four strand weft for a heading. For the border weave 5 rows of yellow Home-craft cotton. Now a row of Spanish weave with the yellow, Open the shed, go under four warps, change shed, back four warps, change shed, and ahead 8 warps, back four warps, then ahead 8 warps, changing shed as for the regular Spanish weave. Do this all across the row. Then one row of plain weave from the left to right. Another row of Spanish weave, then 5 more rows of plain weave with the same weft.

October 1944

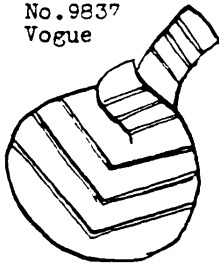
Nellie Sargent Johnson 12489 Mendota Ave. Detroit 4, Mich.

To continue, - weave 6 rows plain weave with the four strand weft, then 3 rows with yellow cotton. For the center weave about 6 1/2 inches, then the border above in reverse back to the beginning. Finished size of this mat is about 11 1/2 x 16. For a larger mat the center can be woven longer.

Plaid place mats of carpet warp are also attractive as well as useful. For these use several colors in the warp and cross them with the same colors in the weft. Use the weft double if a heavier mat is desired. The weft for these is usually better if used double, we think, or have the warp double thread for every other one, then the weft can be single. For those of you using a regular loom space the warp about 3 threads to the inch to obtain the same spacing as the Hearthside Loom.

Bags are always nice gifts, and can be made in great variety. The simple draw string bag described in the February 1944 News is an excellent one. Try this using dark brown for the entire weft, gray for the entire weft, or blue, using the two weights of thread as given in these directions. Nos 5 mercerized cotton put in at intervals also adds to the interest of the weave. Three or four yards of upholstery material or a rug could also be woven on this setup.

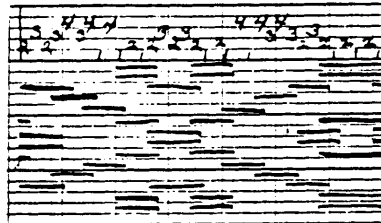
No. 9837
Vogue



Material woven by
Mrs. Cora Crouch.



The sketch of the bag at the left is a most unusual one. It was woven on a striped carpet warp with the following colors, - 2 black, 3 yellow, 2 black, 2 brown, 1 green, 3 red, 1 green, 2 brown. Repeat in same order for full width of Hearthside Loom. Weft is black Home-craft cotton throughout in plain weave. On a four harness loom, thread the loom with the diamond pattern as follows, -



34-2x
14-1
12-1
20-1
34-1
13-2x
34-1
13-1
12-1
14-1
8

To weave this, use levers of Structo loom as indicated on the right side of the draft. For a treadle loom, use opposite harnesses in tie-up.

To make up this bag, it is necessary to weave about 30" of material. Use the Vogue pattern No. 9837 to cut by as shown. This makes a very unusual arrangement of the colored stripes. The pattern No. 9852 is also another bag which does not need a commercial bag frame. These bags could also be made

with brocaded borders. Use some of the figures in April 1944 News for this. Hats and bags can be woven of wool if desired. Fine wools will cover the warp entirely. Germantown will not quite cover it.

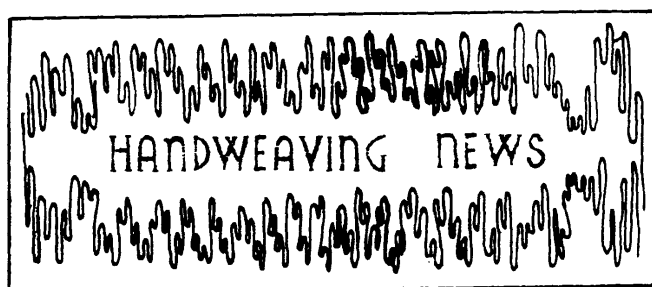
Wool scarves can be woven on the Hearthside loom using shetland yarn for warp. Or if desired somewhat finer yarns can be used. Very fine yarn needs to be warped double. The beat on all of the wool things should be very light unless you wish to cover the warp entirely. Warp for these can be all of one color, but most scarves are more attractive with a striped warp of several colors. This can be woven with different wefts to give a plaid or all of one color of weft. Wool vests with brocaded borders are also attractive, and also small caps.

Wool Afghans can be made in attractive plaids, and are not nearly as expensive as knitted ones. They require much less yarn than for knitting, yet are light and warm. They should be woven in two pieces and sewed up the center, so plan the stripe so the sewing will not be too obvious. Three shades of one color with one color predominant make a good plaid.

I would appreciate hearing from those of you who wish to have me include something special in the News. I try to give what subscribers ask for. If you have not found what you wish in the News, have you written and told me? I am also trying to crowd into less space the same amount of material which I formerly used another page for. If at any time my explanations are not clear enough or too short, please let me hear from you.

Again I wish to remind you all that I am always glad to arrange special exhibits or lessons for anyone that wishes them. I have a very large collection of all sorts and kinds of textiles. Do not forget that these are available.

October 1944 Nellie Sargent Johnson 12489 Mendota Ave. Detroit 4, Mich.



Some Variations of Laid-In Technique.

The so called laid-in technique is one of the simplest forms of free weaving. It allows for much freedom of design, and is not as slow as some of the other techniques. It can be woven on any loom which will make the plain weave shed, and with almost any kind of yarn or thread desired. Laid-in technique is really a form of brocading, in that it always has a plain weave weft which goes from one selvage to the other. So the pattern weft thread is an extra thread not needed to hold the body or background of the fabric together. Or in other words, if you pull out the pattern thread, there will still be the plain weave left.

Sometimes laid-in technique is called a tapestry. A real tapestry is, strictly speaking, a textile which has no continuous plain weave from selvage to selvage. Each color bobbin is carried as far as it goes, then the next color is taken up in its order. There is no weft color which holds the textile together together. If the pattern color is pulled out, only warp remains. We often hear laid-in referred to as "Finger weaving". There are many free weaving techniques that might be called by that name, as far as fingers are concerned, so let's identify this form of weaving as laid-in technique and give it a real name to go by.

The "Lesson on Laid-in Weave" which I have prepared has been a very popular one. The cost of this is \$3.50, which includes full instructions as well as the loan of samples of the weave, in great variety.

Handweaving News for November 1941 contains full directions for the usual form of weaving the technique, both April 1938 and August 1939 contain a number of suggestions for designs for this sort of weaving, and July of 1943 contained directions and design for weaving a pair of curtains in this technique for the Hearthside loom. And the curtains woven of this design were accepted by the Modern Museum of Art, New York, for its "Arts in Therapy" exhibit which is now touring the country. All of these back issues of the News are still available at 45¢ each copy.

This month I am going to give you some of the variations on this form of weaving which are somewhat different than the usual method of using it. The first of these, which I shall call "Laid-in lines," was derived from some of my Peruvian textiles. These lines in the ancient pieces were woven of threads much finer than the body or plain weave. This characteristic is somewhat different from the usual procedure in this technique, because the pattern weft color of laid-in technique is generally a coarser thread than that used for the plain weave background of the textile. In experimenting with this form of weaving on the Hearthside Loom, the coarse soft spun cotton yarn was used for both the plain weave and pattern thread. A good plan is to try out different kinds of threads for the first attempt.

This laid-in line weave is typified by having two plain weave wefts for the full width of the fabric, 2 long pattern weft skips on the back and 2 lines of pattern design on the front. A simple design of slanting lines of spots is shown at Figure No.1 below. On this each ~~cross~~ of the design is a weft shot, and the straight vertical lines represent warp threads. This same design worked out for the threads is shown at Figure No.2. The spaces on Figure No.2 are the places where the pattern weft makes a long skip on the back. They are not put in on the drawing so it will be clearer and easier to follow.

Method of Working the Technique. Materials used for this on the Hearthside loom were Home-craft soft spun cotton yarn in plain blue for the plain weave, and white for the pattern shots. Carpet warp about 8 threads to the inch. Weave about 10 shots with blue for the plain weave heading. Change to A shed. With the white pattern weft, start at the right edge, and into the open shed, go under just four of the raised warp threads. Then go down underneath the next 9 warp threads, making a long skip below all of these warp threads. Now carry the pattern weft thread up into the shed again, and under four raised warp threads. Then down under 9 warp threads again, and so on for the width of the loom. Change to the B shed, and with the white pattern weft, come back the same way from left to right. It is easier in starting back from the left side, if the 9 warps for the long skip underneath are counted, and the pattern weft then put in at the place where it belongs. Be sure to keep the correct alternation as shown on the drawing at Figure No.2. After these two pattern weft rows are completed for the full width of the loom, change to the A shed, throw a shot of blue plain weave. Then change to the B shed and throw in another shot of the plain weave for the full width. Continue in the same way following the pattern design. This design is easy to follow for the first attempt, but others can be worked out from this if desired.

As the weaving proceeds, it may be necessary to add extra blue wefts in the empty spots where the white thread makes the long skips on the back. To do

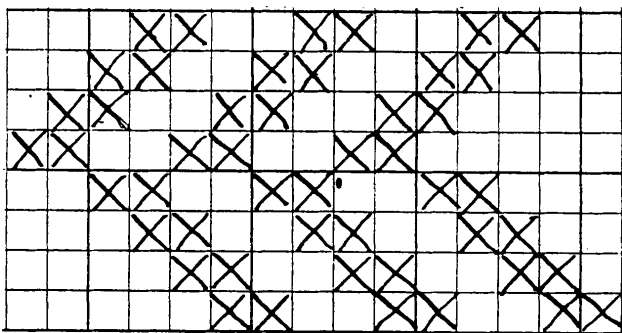
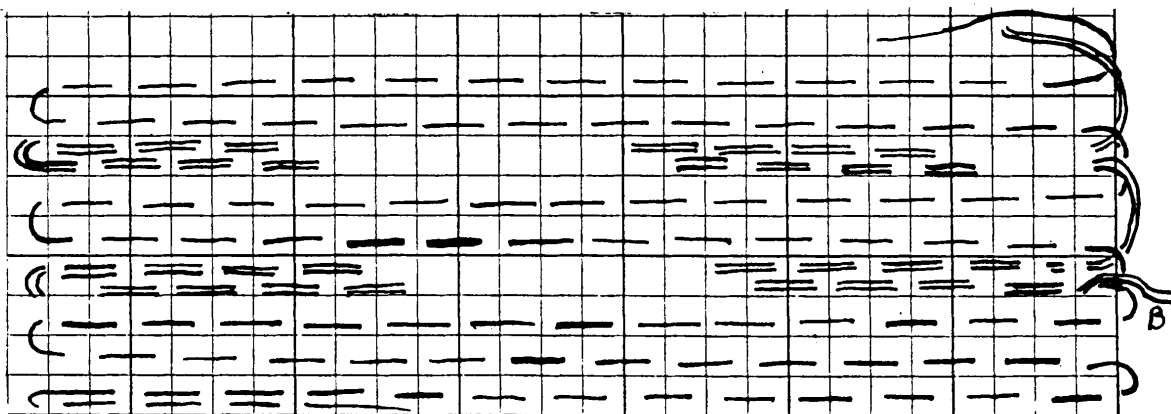


Figure No.1 Pattern Design

this just carry the blue plain weave weft across this space as you would work the spanish weave. Carry the blue weft up to the place where the white pattern ends, change shed, bring blue weft back, change shed and bring blue weft forward into the next space, and so on for the full width. If the pattern weft is very fine, this may not be necessary.

Figure No.2 Drawing showing method of working laid-in line technique.



In these days of scarcity of cotton threads and yarns, possibly some of you have been wondering what you can use for weaving. I hope you all have some kind of a rag bag to turn to, for if you have it will yield you many unusual and interesting colors and textures. Perhaps you have a worn out dress which has seen its best days, that you can use, or some old neckties or stockings. This is a time to test your ingenuity and skill to use up easily available materials which you may have right at home. And results can be beautiful if you give the problem sufficient thought, and are willing to experiment a bit.

Wrapped laid-in technique. Calls for the use of rags. This can be used for rugs, but is also very nice for place mats for luncheon sets if the rags are cut very fine, and of firm material, such as percales etc. The method is very simple to do. A rag of pattern color is wrapped around the plain weave weft, at the place where it is wanted for the design, and for the length of the line needed for the design. A thin material for the design color works better than a heavy material. And cut this rag wide enough to completely cover the plain weave weft. The design can be drawn out and pinned beneath the warp threads to make it easy to follow, or the wrapped wefts may be put in "hit and miss" if desired.

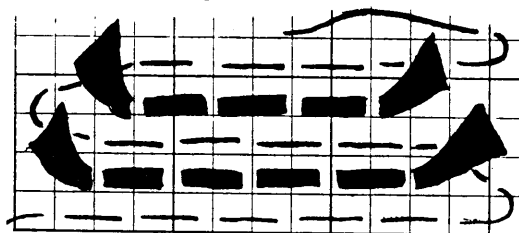
Weave a heading of the material to be used for the plain weave background. This can be a plain color or any available material. If a figured material as percale or rayon is used, try to accent one of the colors in this material by using a plain color for the pattern wrapped color. For instance, if there is blue, green, and yellow figures in the background material, use one of these colors for the plain wrapped color weft.

For place mats on the Hearthside loom, cut the plain weave material, if of percale, about 1/4 inch wide. Tear these strips lengthwise the material if possible. These pieces may be knotted together as described in "Weaving on the Hearthside Loom" or they can be sewed together. Put the plain weave weft thread in the shed on a slant. Twist this with the fingers, and push into place with the beater which crushes it together. Then pull the weft out a little, and wrap it completely with the pattern weft color as shown at

Figure No.3 How to wrap the weft.



Figure No.4.

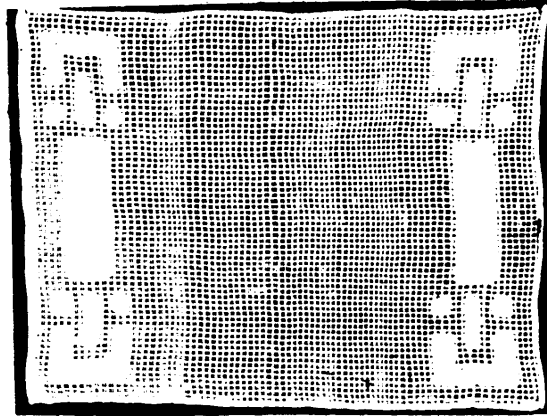


At Figure No.4 is shown another method of using rag strips, although any other kind of materials desired can be used instead of rags. I have never seen this used but once, and that was at the Finnish building at the World's Fair in New York. Some very handsome drapes woven of rayons used this form of weaving. Several shades of rayon were used for the laid-in strips. These were used to outline tree shapes of large design.

The principle of this form of laid-in is to cut short strips of the design color wefts and lay them in the same shed as the plain weave weft, leaving the ends of these strips long enough to stick out some on each end. This gives a raised outline which is excellent for many things.

This technique can be used for fine as well as coarse weaving. One experiment woven on the Hearthside loom was very successful. Percale strips about 1/4 inch wide were used for the plain weave, and blue linen strips from an old dress were used for the pattern wefts. The percale was a blue line check, which when woven gave an interesting greyed blue color. This made some unusual place mats of good texture. I hope some of you will wish to try these forms of weaving, and will let me know how you come out with it.

Handweaving News



Another Form of Bronson Weave.

Handweaving News for December 1942 and 1943 gave the structure and characteristics of two forms of the so-called "Bronson" weave. This month I am going to give another form slightly different in texture from either of these. It is similar to the lace weave, and makes an open effect which is excellent for luncheon sets and also for thin glass curtains. The first pattern at Figure No.1 would work out very well for curtains, and the other one is an unbalanced pattern the same key draft as was used in the News for July 1944 on Page 2. Refer to this in order to see the different ways in which it might be woven.

Structure of the Weave. This weave is a two block pattern arrangement for the 4 harness loom. It is very easy to design your own patterns too. The two units we have found most useful are threaded 3,4,3,4,3 and 2, for one pattern block. And 2,1,2,1,2 and 3 for the second pattern block. This is what we call a 5 and 1 threading. The same effect can be gained if the pattern block skips are written 2,1,2 and 3; and 3,4,3 and 2; or a 3 and 1 threading draft. This can be used for a coarse warp set far apart. The same way, 7 and one threads could be written for each pattern block, which would make a 7 and 1 threading draft, used of course instead of either the 3 and 1 or the 5 and 1 threading draft.

This 7 and 1 threading should be used for a very close setting of the reed. This is a one shuttle weave, and it is generally better to use weft which is about the same size as the warp.

Tie-up for this weave. Plain weave for this threading draft is the same as for regular over-shot weave, namely 1&3 for one shot and 2&4 for the other shot. Just below the threading draft at Figure No.3 on the next page, the woven effect has been drawn down, but this does not give much of an idea of the lace effect of the weave. However it is important to note on this, that there are three shots of plain weave between every shot of the pattern skips, and when the pattern block changes from one to the other only two shots of plain weave occur. Be sure to keep to this order when weaving. For a loom where the harnesses sink, the order of weaving is 134, 24,13,24 repeated for one pattern block. For the other use 124,13,24,13; repeated for the second pattern block. On the Structo loom use just the opposite or, 2 alone,13,24,13 for one pattern block, and 3 alone,24,13,24 for the other pattern block. Of course the pattern blocks can be repeated as many times as desired, but always remember that when you wish to change to the other pattern block, only use two shots of the plain weave before putting in the single shot of pattern weft for the next block.

Figure No.1 Key Draft

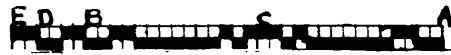


Figure No.2 Threading Draft for Key draft at Figure No.1 above.

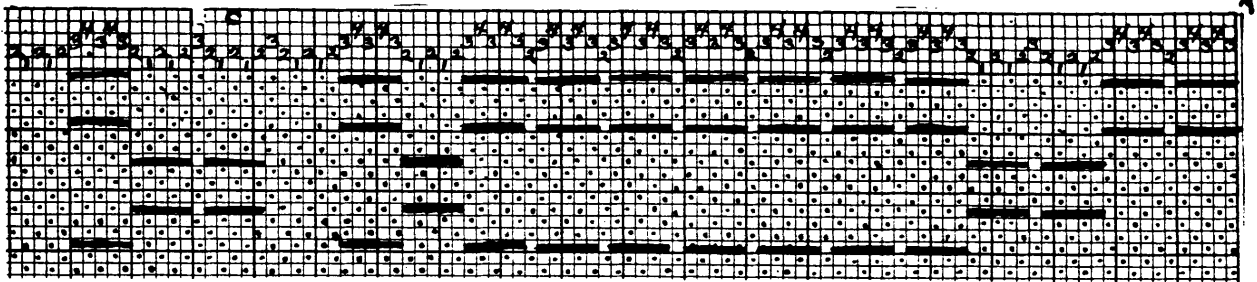
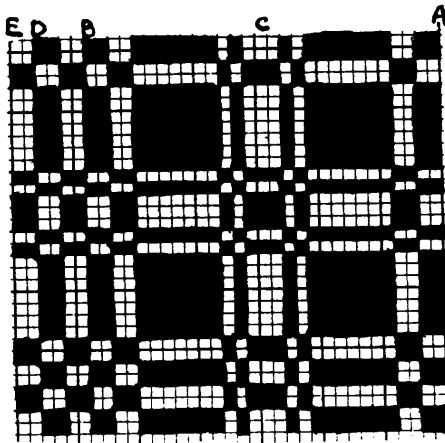


Figure No.3 Pattern effect of the Corner of No.1

On the draft above from A to B is the border. C is the center of the border. From B to D is 22 threads, this should be repeated for the center as many times as is necessary for the width of the curtain. Then thread from D to E for the end. If the same border is desired on the left edge, then thread from B back to A again.



The method of weaving this pattern is explained on Page 1.

At Figure No.4 is the draft for an unbalanced pattern for a place mat. The border is from A to E. Thread this, then repeat from E to F 6 times. Then from F to G. Repeat from G to H, 3 times for the last 9 unit block on the end. The use of unbalanced drafts of this sort is a new idea. Do you like it?

Figure No.4 Key Draft for Unbalanced Place Mat.

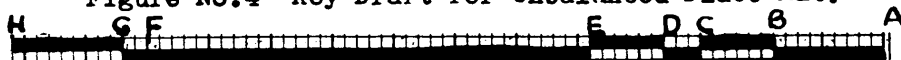
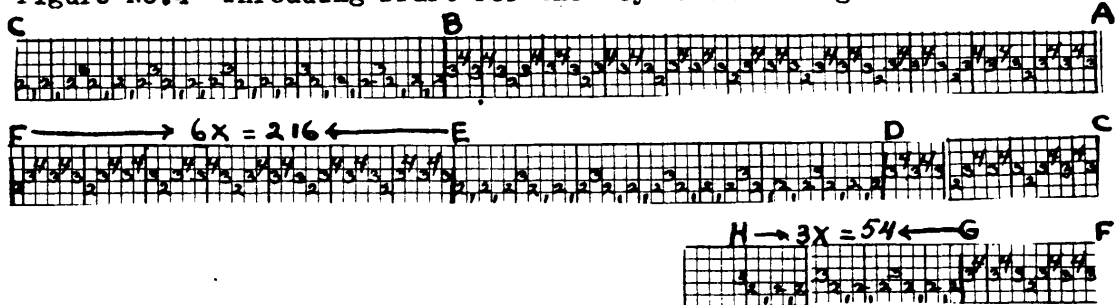


Figure No.4 Threading Draft for the Key Draft at Figure No.4



The above threading draft can be woven in a number of different ways to secure the effect as shown at Figure No.5 and 6 Page 2 of the July News. This same threading draft may be woven in over-shot if desired.