WEAVING ON THE HEARTH SIDE LOOM

by Nellie Sargent Johnson
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Grateful thanks and acknowledgment is hereby given to all of my students who have helped with the preparation of the material for this leaflet. The weaving described has been chosen from the regular work of beginning students in my Handweaving Courses at Wayne University, Detroit, Mich. It is hoped that these suggestions will prove helpful and show the way to new possibilities for the use of the "Hearthside" Loom. And give pleasure and happiness to all who may wish to use it.

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This booklet has been prepared for the benefit of those who wish further help and instructions for the use of the "Hearthside" loom. It includes directions for the making of a new warp and describes step by step how to thread the heddle and tie up the loom again. It also contains directions how to make brocaded pattern rugs, plans for more striped rugs, a threaded pattern rug, open warp curtains, luncheon sets using plaid effects and cornshucks, etc.

The "Hearthside" loom is sold already warped and threaded with a five yard warp of Maysville Carpet Warp. When this warp has been used up, the next step is to learn how to make a new warp and thread the loom again. If the following directions are carried out step by step, we believe you will not find this difficult to do.

Making the Warp. This is the process of measuring the length of the threads to be stretched lengthwise on the loom. Warp can be made for the full width of the heddle, or for only part of the width if desired. After the length of these warp threads has been measured (this may be done on chairs or on a warping frame), each warp thread is threaded through the holes and slits of the heddle, tied to the back or warp beam of the loom, rolled up on this beam smoothly and evenly, and then tied in groups on the front cloth beam, and we are ready to weave.
Decide what you wish to weave, its width and length. For rugs, curtains, or drapes, set up the full width of the heddle, or 214 warp threads will be needed. For narrower things as luncheon sets, bags, etc., for a width of about 12", only 110 warp threads are necessary. The first time a warp is made, do not make more than 5 yards.

How to Determine how much warp to buy. One-half pound spool of Maysville carpet warp contains 600 to 800 yards. You need 214 warp threads for the full width of the heddle. Each one of these warp threads is to be 5 yards long. So 214 x 5 equals 1070 yards, the amount to buy for the length of this warp. Thus 2 tubes will be needed.

Devices for Winding a Warp. There are a number of ways to measure the length of the warp threads. One of the simplest ways, and one which is always available is to use three chairs, as shown at Figure No. 1 above. A sketch of a warping frame is shown on Page 6.

To measure the required length of the warp, take a yardstick or tape measure, and measure off from the spool of carpet warp, a thread 5 yards long. This length should always be that needed for the length of the warp to be made. Make a slip knot at the end of this length. Tie the free end of this thread to chair A as in Figure No. 1. Carry this warp thread across the back of chair B to chair C. Have the slip knot in the warp come at the edge of chair C. Arrange the distance between the chairs so that it does come here. At this point, turn the course of the warp around the other side of the third chair C, and back to make a figure 8 between the chairs A and B. Continue to carry the thread around the chairs, until there are ten warp threads on each side of the chairs A and B, making a total of 20 warp threads on the chairs.

Counting the Warp threads. To aid in keeping track of how many warp threads are on the chairs, loop a colored thread over the place where the "cross" or "leash" occurs between the chairs, as shown at Figure No. 2 at D. Just cross the ends of this colored thread, do not tie them, over the top of each group of 20 warp threads as they are put on the chairs. And have this thread long enough to cross over every group of 20 threads to the end of the count. For 214 warp threads, the colored counting thread will have to be crossed 10 times, making 10 groups of 20 threads each. Then put on 14 more warp threads and cross again to make the total. Tie the counting thread loosely in a loop knot. Cut the thread from the carpet warp spool at the end where the warp ends. If knots occur as the warp is put on the chairs, break the thread at the chair nearest the knot. Tie the thread together again at the edge of the chair with a knot, and continue the warping.
Inserting the Leash Sticks. Leave in the counting thread and insert two flat leash sticks in the figure 8 openings between the chairs to hold the cross between the warp threads as shown at Figure No. 3. Tie the ends of these two sticks together so they cannot slip out. The sticks should be as long as the warp is wide. Do not remove these until the warp is wound up on the warp beam.

Chain ing the Warp. Now pull all of the warp threads off the chair C. Make a loop of this warp as at A of Figure No. 4, with the right hand. Let this loop fall down on the length of the warp which must be held rather taut from the chairs A and B. Make a chain as in crocheting, by pulling a loop of warp up through the first loop as at C of Figure No. 4. Continue looping the warp up to within a foot or so of chair B. Tie the last loop of this chain with a thread of another color, to prevent the loops from undoing. Then slip the rest of the warp with leash sticks attached, off chairs A and B. The warp is now ready to thread into the holes add slits of the heddle.

Threading the Heddle. If the heddle is to be threaded narrower than the full width of the heddle, be sure and start to thread the heddle so there is an equal number of threads on each side of the center of the heddle. Spread the warp out on a table with the cross and leash sticks toward you, put something heavy on the looped chain to hold it down. Remove the colored counting thread between the leash sticks. You will now see that there is a warp thread above and one below the leash sticks, if the warp has been made correctly and in order. Cut the first two warp threads on the right and thread them through the first slit of the heddle. After that continue cutting and threading one thread through a hole and one in a slit. End by putting two threads in the last slit. A fine crochet hook may be used to draw the threads through the heddle. Or a fine needle with a short double thread about 2" long can be used as shown above at Figure No. 5. Slip the end of the warp thread as it is cut into the loop, and draw it through the heddle. When ten or more threads have been threaded through the heddle, loop them into a slip knoc loop as at Figure No. 6. This loop knot is easily untied after the heddle is threaded, and prevents threads from slipping out of place.

Tying the Warp Threads to the Warp Beam. After the heddle is threaded, the warp must be tied to the warp beam in order to roll it up. To do this, place the heddle on the top of the heddle support with the looped groups of the threaded warp threads facing the warp beam of the loom. Draw the center group of ten looped threads out, untie them. Then put them under the apron bar of the warp beam. Separate them into two groups, bring them up over, down and cross them at the back of the bar, and tie in a looped knot as shown at Figure No. 7. Tie the rest of the groups to the apron bar in the same way all across the width of the heddle. Warp threads are always tied up in this manner, so they can be easily untied if desired. The warp is now ready for the important task of winding up on the warp beam. Before this is begun however, it is well to cut some strips of heavy cardboard to wind up with the warp to help keep it smooth and even. These strips should be about an inch wide, and as long as the width of the warp beam. Heavy paper may be used for the same purpose if desired, and should be made ready to insert as soon as the warp has been wound on the warp beam for a couple of turns.
Winding the Warp on the Warp Beam of the Loom. Leave the leash sticks in the warp to help keep it straight as it is being wound on the loom. As soon as the warp threads are all tied to the bar of the warp beam, turn the handle of the warp beam until all of the warp is on the back brace of the loom over the warp beam. Put the ratchet on the warp beam so it cannot unroll forward. Now it is necessary to have the help of another person. One person must hold the warp evenly and straighten it out in front of the loom, while the other winds it up on the warp beam and puts in the loop of the chained warp. To begin this, untie the place where the loop of the chained warp was tied. Let out about a yard or so of the chained warp. Push the leash sticks forward toward the breast beam of the loom to help straighten the warp threads out. Divide the warp chain into two groups of threads, pass the hands through one of these groups with a combing motion until all of the threads are straight. If the warp is badly tangled, pull and then loosen in a snipping motion on the group of threads as you stand in front of the loom. The heddle and leash sticks can also be brought forward to help with this. Do not try to force the heddle through an impossible tangle. When one group of the warp threads has been straightened for a yard or so, do the same thing to the other group. Take the left group of threads in the left hand and the right group in the right hand. Be sure all the threads are as even as possible. There should be no loose threads.

Make the loom stationary by letting the back notch on the bottom of the loom frame slip over the edge of a firm table. This will help keep it in place and keep the loom from pulling forward by the person holding the warp in front, while the other person is winding it up at the back of the loom. Have the warp from the edges of the heddle come straight toward you, let them come from the center of the heddle into your hands like a V, as the two groups are firmly held in front of the loom. As the person at the back of the loom winds up the warp on the warp beam by turning the handle, the person in front must pull a little and keep all the warp threads just as taut and even as possible. There must be no loose or tight places. The finished weaving will not come out well. There is no way to fix a poorly wound warp but to do it over again, and if the threads are not firm and even on the warp beam, so this part of the preparation must be carefully done.

As soon as the first length of straightened warp has been wound up and the person's hands holding it in front are near the heddle, stop winding up and straighten out more warp. Then wind up as before. Watch the ends of the warp as they go over the warp beam, be sure they are not loose. It is helpful to insert one inch wide strips of heavy cardboard over the warp as it is wound up on the warp beam. Or heavy paper cut for the full width of the warp beam may be used instead, and rolled up with the warp threads. These help to keep the warp smooth and even. Continue winding up the threads on the warp beam until there is only enough warp left to tie to the front cloth beam bar. Cut off very uneven ends and tie the warp in groups to the front cloth beam bar in the same way as the warp was tied up to the warp beam before beginning to wind the warp. This is shown at Figure No. 7. But this time, it is most important to have every group of the warp threads tied so that the tension on all of the warp threads is the same, all across the width of the loom. The warp does not have to be too tightly tied, but it must be even. Pass the hands across the warp threads after they are all tied, pressing down a little and it is easy to find where threads are too tight or loose. No threads or groups of threads should be tighter or looser than another group. Time spent in doing this carefully is well spent. As soon as the loom is properly tied up, we are ready to weave.

Operation of the Heddle. The heddle loom is very easy to use. Place the heddle on top of the heddle support, and one group of warp threads are raised to form a shed. Insert one of the warp leash sticks in this shed. Then place the heddle under the lower part of the heddle support and the opposite warp threads are raised. Insert the lower leash stick in this shed. These leash sticks make a firm beginning to beat against when starting to weave. Wind a shuttle with weft thread. Do not wind it too full. Raise the heddle. Always pass weft through the shed on a sharp slant as at Figure No. 10. Fasten the end of weft by turning it back into the shed around the edge warp thread. Push weft into place with heddle. Push the heddle evenly as before. The rest of the weft is put in. Then put in next row of weft. Push it into place with heddle, change shed, beat weft down close with comb, and so on. Keep straight, even edges, and do not pull in weft. Finished width of weaving should never be less than 25 inches. Be patient and willing to practise to get good results.
Figure No. 8
Heddle raised to form one shed

Figure No. 9
How to Wind a Shuttle

Figure No. 10
How to Put in the Weft Threads

Figure No. 11
How to Add a New Weft

Figure No. 12
Skein reel used to hold skeins of yarn when winding a shuttle

Figure No. 13
Warping Frame — Can be used to make a warp instead of chairs

Tie the end of the warp at E on frame, pass it to B. Turn at B and make the cross at C. Then back to E again and so on. This frame will make a warp about 11 yards long from E to B.
CHOICE OF YARNS AND THREADS

The Hearthside loom was developed with the idea of using coarse yarns and threads. The slits and holes in the heddle are set so that there are about 8 warp threads to the inch. Maysville carpet warp makes an excellent warp which can be used for rugs, bags, runners, luncheon sets, etc. Many different kinds of threads may be used for the weft. Maysville Rug Filler which comes in large skeins will make a firm durable rug. Rags torn in strips, the width depends on the weight of rug desired, or stockings cut or looped, may also be used for rugs. When using these, try out a few shots on the loom to see how wide to cut them. Finely cut percales and stockings also make very satisfactory bags and luncheon sets. Reveled jute from worn out burlap bags can be used for bags and luncheon sets. All of these materials may be dyed if desired with any good commercial dye. Maysville Home-craft cotton is an excellent weft for runners, bags and luncheon sets. When brocading a rug pattern, use this for the plain weave between the picked up brocaded row which can be of rags or Rug Filler. Wool yarns such as Germantown or Shetland may be used for weft alone or for both warp and weft. When using these, the beat should be very light. Shetland yarn will practically cover the warp without any difficulty. This yarn will make excellent bags and scarves with warp and weft the same. Germantown yarn may be used for warp and weft for bags, and also for afghans or couch covers. For these weave either two or three strips and sew them together after removing from the loom. Bedspreads can be woven in strips also. For these use carpet warp, and it is best to put two warp threads through each strip with one thread in a hole.

The choice of color to use for weaving is also important. Many people have an instinctive feeling for color and are able to gain handsome effects with the simplest materials. Rules for color combinations are difficult to write out on paper, so much depends on the quantity, intensity and proportion of the colors in the whole design. Two colors are always easier to use than several. Unequal stripes of color are generally of more interest than equal stripes. Greyed or dull colors with a small amount of light or bright color for accent will often work out well. When using a color scheme of several colors, try to choose a dark color, a light color, a dull color, and a bright color. Let one color predominate in this scheme, but remember that the effect is usually better when either the dark or the dull color predominates. Of course in this case the dull color need not necessarily be dark. Small amounts of bright colors often serve to add interest to an otherwise dull color scheme, but should be used sparingly in most cases.

How to plan Length in proportion to Width. One of the most frequent questions asked by a weaver is "How long shall I make it?" It makes no difference what is being planned, the width should be in good proportion to the length. To help with this, the simple arrangement based on the width of a square is given below. Start with the width of the article to be woven. Draw a square ABCD, as at Figure No. 14.

The sides of this square are equal to the width of the desired article. This may be drawn to scale, using 1/8 inch to equal 1 foot. Draw the diagonal AC of this square ABCD. Now measure carefully the length of this diagonal AC. Then measure this same length AC on the line AB extended. This length will come to the point E, so that the distance AE will be the next distance which will be in proportion to the width of the square. AE is the first length beyond the square which is in proportion to the width of the square. If a longer article is desired, continue line AE. Draw EF perpendicular to this, and the rectangle AEFD is formed. Draw the diagonal of this, AF. Measure AF on the line AE, which comes to point G. Now the distance AG is the next length which is in proportion to the width of the square ABCD. Draw the diagonals in the same way for any desired length. This plan is based on the theory of dynamic symmetry and is mathematically correct, but it is not necessary to go into all of that. Suffice it to know that this is a simple workable plan to use to obtain correct proportions for the length and width of any articles you wish to weave. People who are sensitive to good proportions need not use this plan, but it is of much help to beginners.

Figure No. 14
DESIGNS FOR THREE UNEQUAL STRIPED RUGS

In the instruction leaflet sold with the "Hearthside" loom, directions were given for three weft striped rugs. The designs below show how unequal stripes can be used to form an all over patterned rug, instead of just end borders. Many color arrangements are possible. A good plan is to draw out on a large sheet of paper the actual sizes of these stripes for the rug being woven, then there is no guess work.
RUG NO. 4 WARP STRIPES OF COLOR

A good way to use up odds and ends of carpet warp is to make warp striped rugs. If a neutral color of weft is used or a weft of all one color, the warp may be of bright colors. Make a warp of 210 warp threads for the rug shown at Figure No. 15. Arrange the colors as follows,—25 dark brown, 16 tan, 10 dark brown, 3 orange, 2 green, 3 henna or rust, 2 yellow, 10 dark brown, 16 tan, 3 orange, 2 green, 3 rust, 2 yellow, 16 dark brown for the center stripe,—repeat back in the reverse order to the beginning.

The rug as shown was woven with looped stocking weft. To keep it from having too many weft stripe effects, mix up the stocking wefts as they are looped together. It is easier and quicker to loop stockings than to cut them in strips and sew them together, and the knots make an interesting texture when woven. The method of looping the stockings is shown below. Percale or rag strips of any kind can be dyed one color and looped together as shown at Figure No. 17. Or the rug may be woven with tan, grey, or dark brown Maysville Rug Filler if desired. About 3 skeins will be needed for this.

**Figure No. 15**
Warp Striped Rug

**Figure No. 16**
Method of Joining cut
stocking loops

**Figure No. 17**
Method of Looping
rag strips

**TWO HARNESS THREADING DRAFT FOR RUG NO. 5**

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          D F E C B A
180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 9 8 7 6 5 4 3 2 1
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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 = " = " is the center, repeat from B to C, 4 times.
  " 160 "  " 128 "
D to C once, " 4 "  " 3 "
then starting at B, thread to A " 42 "  " 33 "
A to E, for end border. " 10 "  " 5 

Total Warp 268 207

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. Rag strips may also be used for weft if two contrasting colors are used. Be sure they are cut narrow enough so they will cover the warp.
Weaving the Rug. Weave a heading of carpet warp one-half inch wide. No true plain weave is possible on this threading. Wind two shuttles, one with white rug filler, and one with rose. Put in a shot of white change thread to change shed, and throw in a shot of rose rug filler. Fasten the ends of the white and rose weft around a warp thread. Then alternate the two colors until 4 shots of each color have been put in. Change the shed each time the weft color is passed through. 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, weave a shot of rose, then white, rose, white, rose; changing the shed each time the weft color is put in. To begin the third block, put in a shot of white weft in the same shed as the last shot of rose of the second block. Now alternate as before; rose, white, rose, white, rose, changing the shed each time. From here on, note that the first shot of white for the next pattern block is always put in the same shed as the last shot of rose of the preceding block.

5th " - I W, I R, I W, I R.
6th " - I W, I R, I W, I R.
7th " - I W, I R, I W, I R.
8th " - I W, I R, I W, I R.
9th " - I W, I R, I W, I R.

This ends the pattern border and the last shot is of rose weft. For the center, put in the next shot, put in the next shot, and weave 22 inches for the center of the rug, alternating one shot of white and one of rose, changing the heddle and shed each time the weft color is put in. Repeat the border for the opposite end of the rug as given in the beginning. While weaving watch the alternation of the weft colors at the edges to keep the edges as even as possible. Also take care not to pull in the wefts. Let it lay loosely in the shed as it is put in, before beating it down close. These rugs can be fringed, or if a wider heading is woven, they can be hemmed on each end. The finished width of the border of this rug is about 7 inches, and the total length about 36 inches. This form of weave makes a thick, heavy, durable rug which will stay on the floor well.

Figure No. 18
Two harness Pattern Rug

BROCADED BORDERS FOR RUG NO. 6 AND NO. 7

Designs at A and B of Figure No. 19

Materials needed. This rug is woven with Maysville Rug Filler in peach for the main body of the rug; 2 skeins will be necessary for this. The brocaded pattern uses light blue Maysville Rug Filler with white Home-craft cotton for the plain weave after each picked up blue shot of the pattern. One skein of blue and one ball of Home-craft cotton were used. Warp can be white or peach color. Two tubes will make about 5 to 6 yards of warp threaded full width of the heddle, 214 threads.

Weave a one inch plain weave heading with carpet warp for weft. Then wind a shuttle with peach color rug filler and weave 18 shots plain weave. Fasten off the plain weave. Wind a shuttle with white Home-craft cotton, and one with blue Rug Filler for the picked up pattern. Put in one shot of white plain weave. Now with an empty shuttle or flat pointed stick, which is called the pick-up stick, go under then over 3 warp threads all across the width of the warp. Have the warp flat as this is done. Turn the pick-up stick on edge, and through the opening thus made, pass the light blue weft shuttle. The plain weave alternates after each shot of the picked up brocade. Make the opposite shed now, from that of the first plain weave shot of white, and pass the white shuttle through this shed. Pick up another row of under 3 and over 3 all across the width of the warp as before. Be careful to go over and under the same 3 warp threads as the first row put in. Turn the pick-up stick on edge, and put in the blue shuttle through this opening. Change the shed with the heddle, and put in another row of white plain weave. This will make 2 rows of the blue picked up pattern and 3 shots of the plain weave white. Now weave 3 shots of peach plain weave.
The wide border at A of Fig. No. 19 has 2 rows of under 3 over 3 all across the width of the warp, and white plain weave between each picked up row. Pick up the next 2 rows so the under 3 over 3 pattern shots are opposite the first ones picked up. Repeat as shown on the pattern at A until there are 5 rows of blue picked up. Then weave 3 more shots of peach color plain weave, and repeat the first narrow border as given above. With the first 18 shots of peach color plain weave, this border will be approximately 10 inches wide. For the center of this rug weave 24 inches of peach color plain weave. Repeat the same border for the other end. The rug can be finished with a fringe or hemmed if desired.

**Brocaded Diamond Border for Rug No. 6.** Use the pattern at B of Figure No. 19. For this rug use a dark blue, wine or brown warp with Maysville Rug Filler in Wine color for the picked up pattern, and cream Home-craft cotton for the plain weave after each picked up row. Weave a carpet warp heading. Then 18 shots wine color plain weave. For the narrow border weave a shot of cream color, then 2 picked up rows of wine with the cream color. Then 9 shots of wine plain weave. To center this pattern, count to find the center warp thread on the loom. On this thread start at C of the pattern at B. Go over 1, under 2, over 7, under 2 warp threads with the pick-up stick toward the right edge from the center. Do the same thing from center to left. Pick up the rest of the pattern in the same way, putting in the pattern weft, then a shot of the plain weave after it. Always alternate the plain weave shots. For the center of this rug weave as much plain weave as desired, repeat the border on the opposite end.

**OTHER SUGGESTIONS FOR USE OF BROCADED PATTERNS**

At Figure No. 20 is a wool wall hanging for a child's room. Here is the purple cow and other small figures. The designs were taken from a Guatemalan textile, and are given on Page 12. Fine yarn was used for the warp, and tapestry wools for the weft. The brocaded wool cap at Figure No. 21 was woven all of Shetland yarn, dark blue, with brocaded borders of red and of white. Note that the borders go only up to about 2 inches of one edge, so as to have plain blue to turn back for contrast.
The designs on this page may be used for place mats, rugs, bags, wall hangings, etc. They are all picked up in the same way as the method explained on Pages 10 and 11.

One square of the cross section paper design equals one warp thread.

Many different kinds of yarns and threads can be used.

Note that the weft used for the picked up pattern should be coarser than the weft thread used for the plain weave.

For bags use home-craft cotton for the picked up pattern with carpet warp for the plain weave. Candlewick cotton can be used for both pattern and plain weave. Wool yarns such as Germantown or Shetland may be used on a carpet warp if desired. Neck scarves and wool caps can be woven of yarn with end borders of different colors and are most attractive. Shetland yarn can be used for warp also if desired. When using wool yarns beat the weft very lightly. Afghans and couch covers may be planned by making them in two or even three strips and sewing the strips together after removing from the loom. There are many ways of using these borders and figures. A sampler of these designs woven with all kinds of threads and yarns is a very interesting project and one on which the beginning weaver can learn many things.
It is often possible to make attractive bags on the end of a warp which is not long enough for anything else. This unlined bag was woven full width of the loom and about 18" long, with dark green, yellow, and black and white Home-craft cotton twisted together for the stripes. To make up this bag, sew up the sides of the piece. On the drawing below, the distance A to B equals the size of the slit in the wooden bag frame. At A and B, make a cut down, about 2" long. Stitch around this slit and turn it in so it equals A B the slit of the bag frame. Hem down the sides around C and D. Put the strip A to B through the slit of the wood frame. Turn it in and hem down on the inside of the bag. The fold of the material comes at the bottom of the bag. These bags are easy to make. They can be lined if desired.

![Figure No. 24 Striped Bag with Wood Frame](image)

**OPEN WARP GLASS CURTAIN**

Materials required for 4 curtains 2½ yards long:- buy 4 tubes tan carpet warp, 2 natural, 1 light green, and 1 rust. Make a 12 yard warp of 314 threads. Wind 3 tubes of carpet warp at once; 2 of tan and one of natural. Wind the warp on the warp beam as usual, but put in plenty of leash sticks to keep it smooth and even. Thread the heddle with 2 tan threads in each slit, and one thread of white in a hole for the full width of the heddle. Tie up the warp threads carefully to the cloth beam making sure that the tension on all of them is even before beginning to weave.

Preparation of the paper for the open warp spaces. Before beginning to weave, cut 6 strips of heavy brown paper about 2" longer than the width of the warp and 8" wide. Fold once so they are exactly 4" wide. In the same way, cut 12 two inch wide strips, and fold these once through the center of their length. Cut this amount for each curtain to be woven.

![Figure No. 25 Open Warp Window Curtains](image)

Weaving of the Curtain:- For the bottom hem, weave 8 inches of plain weave with tan carpet warp single. To begin the open border, weave one shot of rust, fasten off the ends of this, then weave 2 more shots of tan. Change the shed and in this insert the one inch strip of paper. Change the shed and put in two shots of tan on the other side of the paper, one shot of rust, 7 shots of tan or 1 inch. Then 2 shots of green, 2 shots of tan, change shed and insert the 4" strip of paper. Now 2 shots of tan, 2 shots of green, 7 shots of tan, 2 shots of green, 2 shots of tan. Insert another one inch strip of paper, 2 shots of tan, 2 shots of green, and then 4 inches of plain tan. Repeat from a to c four times for a curtain about 60 inches long, or six times for a 2½ yard curtain length. Allow a 4 to a 6 inch length for the top hem of the curtain. To make the second curtain exactly like the first, take a piece of tape, mark it carefully as the first curtain is being woven, at each place exactly where the borders occur. Pin it to the woven curtain, but do not let it roll up with it. When the next curtain is begun, pin the marked tape on one edge, and put in the open warp borders as they occur on the tape. Do not unroll the curtains as they are woven. When all are woven, remove from the loom, and stitch carefully on the sewing machine on each side of the inserted paper. This fastens the warp, and then the papers may be removed.
HOW TO USE CORNSHUCKS FOR PLACE MATS OR RUNNERS

Many interesting and attractive articles can be woven using ordinary corn shucks for weft material, with Wapsiyle carpet warp for the warp thread.

Preparation of the Corn Shucks. Green corn shucks can be saved from husked corn and laid out on paper to dry. Shucks that have been out in the fields all winter often have much more attractive color in them. And it is quite surprising how much color really does come out in these when they are woven. The shucks are easy to dye with commercial dyes too. Boil them up for about two to three minutes in any good dye suitable for cotton materials. Allow the shucks to cool in the dye bath, rinse well in cold water, and dry spread out on paper. When using the shucks for weaving, wrap them up in a very wet towel and use them damp, they beat together better. To weave with them, cut off the hard portion where they joined the cornstalk, then strip them into strips about 1/2 to 3/4 inches wide. When weaving them it is not possible to use a shuttle to wind them on. Lay a thick end of one strip against a thin end of another in the shed with the fingers. Try to put the strips in the shed so there will be enough length at the edges of the warp so as to make a good turn. The shuck strip can be woven alone, but we have found it best to weave a shot of carpet warp in the same shed as the corn shuck strip; or alternate a row of carpet warp weft and a row of shucks on the next shed.

Place Mat No. 1. Make a warp of 110 threads of tan carpet warp. Weave 1 inch of plain weave with the carpet warp for weft, for a hem. Then start with the corn shuck strips. Put a row in one shed, change heddle and put a row of carpet warp weft in. Repeat this until there are 6 rows of the plain corn shuck strips alternated with a row of carpet warp weft. Then put in 5 rows of rust or brown dyed shucks, always alternating a shot of carpet warp weft between each row of the shucks. Twist a plain corn shuck strip with an orange dyed strip, insert together into the shed, change shed and put in a row of the carpet warp weft, then another row of white and orange twisted shuck, then one row of the rust or brown shucks with a row of the carpet warp weft between each time. Repeat the border on the other end as at the beginning of the mat. Weave 10 inches of plain weave with the natural cornshucks for the center of the mat, then repeat the border as above.

Place Mat No. 2. For this mat the shucks are laid in the sheds in a hit and miss fashion, and a shot of plain weft is put in the same shed with the shuck. Use tan, beige, gray, or white for the carpet warp weft for these. Put in a brown dyed or rust color shuck once in awhile, and some times an orange one which can be twisted with a plain one if desired. Vary the lengths of the shucks as they are put in the sheds and also the number of shots of the carpet warp wefts between the rows of the corn shucks. This is shown in the center of Figure No. 26 below.

Place Mat No. 3. Warp stripes of color are attractive and may be used in any warp arrangement which suits one's fancy. Rust, dark brown, yellow, and a little orange color, are good combinations which bring out the colors of the corn shucks. Weave all of natural colored shucks. A good finish on the ends is to leave about 2" of warp between each mat as the weaving progresses. Then when they are removed from the loom, stitch on the sewing machine next to the first row of the heading. Cut between each mat so the fringe will be about 3/4 to an inch long.

Warp arrangement: 10 white or natural carpet warp, 10 rust or brown, 50 white or beige, 10 rust or brown, 10 white or natural, making a total of 100 warp threads for the mat. Of course many other color combinations are possible for these. This is shown on the right in Figure No. 26.

Figure No. 26

Three Corn Shuck Place Mats
VARIA TIONS GAINED BY THREADING TWO COLORS IN THE WARP THREADS

Place Mat No. 4, Figure 27. Materials, one tube of white Maysville Superior Carpet Warp and one tube of gray or slate color. Any other color desired may be used instead of the gray, and be sure it is fast color. Make a warp using 34 gray warp threads and 63 white threads. This makes a total of 97 warp threads, and the finished width is about 10 inches. For a wider width increase the number of white threads for the center stripe in the warp. Thread the heddle in the following order,—Thread 2 gray threads in the first slit. This makes a good edge. Now thread one thread in each hole and slit for the width of the warp as follows,—I white, 2 gray, I white, I gray, 2 white, I gray, I white, I gray, 2 white, I gray, I white, 2 gray, I white, I gray, 2 white, I gray, I white, I gray, 2 white, I gray, I white, 2 gray; for the side border. Then thread 31 white threads for the center. Then repeat the border in reverse back to the beginning ending with 2 gray warp threads in a slit.

With either the gray or the white carpet warp, weave a heading one and one-half inches wide. For a hem weave 1/2" more. There are two ways of using the weft color which gives slightly different effect. Use two shuttles one wound with gray and one wound with white weft. Change the shed after every shot of weft in the shed:

1. Weave 2 shots of gray after the 1/2" heading of white is woven. Then 1 shot of white and one of gray alternated 3 times or a total of 6 shots. Two shots of white, then 1 gray and one white alternated 3 times or 6 shots. Repeat from * to * for the length desired, ending with 2 shots of gray. Then weave the 1/2" heading for the other end of the mat.

2. Another way to weave this is to weave the 1/2" heading with gray weft. Weave a shot of white in the same shed as the last shot of gray of the heading, then (a) one gray, I white alternately 3 times, or 6 shots in all. One gray shed then (b) one white, I gray in each shed 3 times alternately or 6 shots then one white in the same shed as the last gray. Repeat (a) then (b) for the length desired, and weave the 1/2" heading with gray for the other end of the mat.

Take care in the weaving of these to keep good edges and watch the alternation of the weft threads at the edges. These are simple but effective place mats.

Red Border Mat No. 5. Make a warp as follows,—24 red threads, 12 gray, 6 white, 12 red, 54 gray, 27 white. For this, all of the slits of the heddle are threaded with 2 threads, and the holes with one thread. Thread the heddle as follows,—24 red threads, 2 in a slit and one in a hole; then 2 gray in a slit and one in a hole; repeat 6x: 12 red threads, 2 in a slit and one in a hole; for the remainder of the warp, thread 2 gray in a slit and one white in a hole. Weave 12 shots of red carpet warp wound double on the shuttle. Then wind a shuttle of gray warp double, and a shuttle of white wound on single. Weave a shot of gray, then a shot of white alternately for 12 shots. Then 8 shots of the double red weft. For the border stripe, use one shot of the red double weft and one of the Home-craft cotton alternately 7 times. For the center, weave 9 1/2" of the white Home-craft cotton weft. For the other end, repeat the red striped border as given above. The color of the gray warp crossed by the white Home-craft cotton is attractive and unusual in this mat. Other colors may of course be used in the same way if desired.
In the short space of this book, it is possible to suggest only a few of the many different articles which can be woven on the Hearthside Loom. Some persons may think that because it has only the plain weave shed not much can be done with it. But some of the most beautiful textiles in the world have been made on a loom no more complicated than this one.

The beginner who starts to use the Hearthside Loom is off on a real adventure into the fascinating field of creating designs and color effects through the use of threads. By the use of imagination, unlimited possibilities may be discovered and bring much real pleasure and profit as well. The weaver's success comes from the knowledge and skill with which he uses his loom and the threads with which he weaves. If he becomes interested enough he can learn more and more of the different weaving techniques which will not only be very absorbing, but will furnish a lifetime of pleasure. To help those who may wish to study some of these techniques, the lessons listed below have been prepared. Full detailed instructions are included. Also woven samples of the special kind of weaving described are loaned for a period of two weeks for study. Cost of these lessons is $3.50 each.

LESSONS ON HANDWEAVING TECHNIQUES.

I. Variations of "Laid-In" Technique.
II. Variations of Spanish Weave.
III. Flossa Rug Knot and how to use this for Rugs.
IV. Peruvian Tapestry on Gauze Weave.
V. Peruvian Twisted Lace Weave.
VI. Four Harness Double Weave or "Finnvav". Cannot be woven on the Hearthside Loom.
VII. Several methods of Weaving Brocade Designs.
VIII. How to Weave Danish Stitch.
IX. The "Bratten" Opend Lace Weave.
X. Lace Weave from the Island of Crete.

TRAVELING EXHIBIT OF "WEAVING ON THE HEARTHSDIE LOOM".

A special exhibit of articles which can be woven on the Hearthside Loom has been prepared. It contains many of the pieces shown in this book, as well as others, about 20 in all. This has proven of much help and inspiration to many people. Cost of this is $5.00, plus transportation costs. It is loaned for a period of two weeks to each subscriber.

HANDWEAVING NEWS.

This is a monthly instruction leaflet which has been sent out to subscribers for $3.00 a year, since 1933. Its purpose has been to give help and instruction on handweaving problems, as well as to introduce rare and little known weaving techniques. Some of the back issues of Handweaving News have been compiled into four volumes as listed below, and are available as long as the present supply lasts. Separate back issues can be supplied at 45¢ each copy.

<table>
<thead>
<tr>
<th>Content of Handweaving News for 1943</th>
<th>Compilations of Back Issues of Handweaving News</th>
<th>Four volumes $3.50 each</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan- Code Drafts for 4 harness looms.</td>
<td>Vol I. Weaving with simple equipment includes Use of Broomstick loom, card-board, cardweaving, etc.</td>
<td></td>
</tr>
<tr>
<td>Feb- &quot;Weaving on the Hearthside&quot; loom</td>
<td>Vol II. Use of the Heddle Loom. How to make a warp, brocading, spinning etc.</td>
<td></td>
</tr>
<tr>
<td>(same as this booklet.)</td>
<td>Vol III. Free Weaving Techniques. All of this material suitable for the Hearthside Loom.</td>
<td></td>
</tr>
<tr>
<td>Mar- Cracklet Weave Patterns.</td>
<td>Vol IV. Drafting Patterns for the four harness loom. Includes many drafts for 2, 3, and 4 block patterns, as well as for the 8 harness loom.</td>
<td></td>
</tr>
<tr>
<td>May- Eight Harness Twill Patterns.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June-Six Harness &quot;Summer &amp; Winter&quot;.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July- &quot;Laid-In&quot; for Hearthside Loom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug-4 harness &quot;Over-shot&quot; Weaves.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept- Peruvian Double Brocade.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct- Peruvian Silt Tapestry Technique.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov- Weaving on a Broomstick Loom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec- 4 harness &quot;Bronson&quot; weaves.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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