## HOW TO RE-WARP AND THREAD THE HEARTHSIDE LOOM.

As soon as the warp furnished with the Hearthside loom has been used up, it is necessary to make another warp and rethread the loom again. For another 5 yard warp, purchase 2 tubes of Maysville carpet warp. The full width of the heddle requires 213 threads, and each of these threads is to be 5 yards long. There are several ways of measuring this warp, but the easiest is to arrange three chairs as at Figure No. I below. Have the edge of chair A, 5 yards from the edge of chair C. Tie the free end of the warp from the tube in a slip knot at the edge of chair A, carry it across the back of chair A, in front of chair B, in front of chair C, across the back of chair C, across the back of chair B, and in front of chair A. The threads cross each other between chair A and B, and this is called the "cross" or "leash". Carry the thread around the three chairs, until there are ten warp threads on each side of chairs A and B. You now have a total of 20 warp threads in this group.

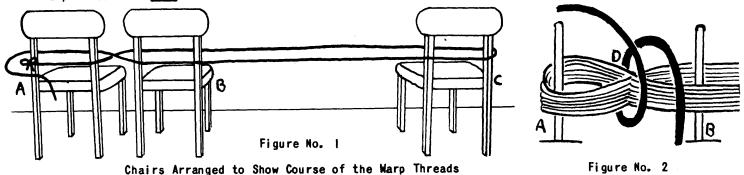
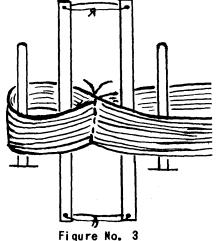
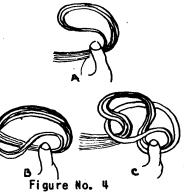


Figure No. 2 Counting Warp Threads



Leash Sticks Tied in Before Removing Warp.

Starting the Chain



Counting the Warp Threads. Take about a yard of thread of another color than the warp. Loop this thread over the 20 warp threads once, do not tie, as in Figure No. 2 D. Each time you have 20 warp threads like this first group, loop the colored thread over them. For 213 threads, this colored thread will be crossed ten times, plus 13 threads more. Tie the ends of the counting thread in a slip knot, and also cut the end of the warp thread from its tube at the edge of the chair where the warp ends. If knots occur as the warp is put around the chairs, break the warp thread at the edge of the chair nearest the knot. Tie the warp together here, and continue the warping.

Inserting the Leash Sticks. Two leash sticks are furnished with the loom. Insert these as shown at Figure No. 3, and tie them together loosely as shown. These sticks are not removed until the warp has been all wound on the warp beam of the loom.

Chaining the Warp. Until the ends of the warp which were tied to the chairs. Pull off the loop of the warp at chair C, as in Figure No. 4 A, with the right hand. Let this loop fall down on the length of the warp as at B. Hold the warp rather taut from chairs A and B as you do this. Make a chain as in crocheting, by pulling a loop of the warp up through the first loop as at C. 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, so the chain will not undo. Slip the rest of the warp, with leash sticks attached, off chairs A and B, and the warp is ready to thread into 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 keep it from moving. Remove the counting thread. There should be a warp thread above and a warp thread below the leash sticks. Separate out the warp threads. Cut

the first loop on the right, and thread them through the first slit of the heddle, a fine crochet hook can be used to do this. Now continue cutting the threads in order. Put one thread in a hole and one in a <u>slit</u>. End by putting 2 threads in the last slit. When ten threads have been threaded through the heddle, loop them into a slip knot as at Figure No. 8 in Leaflet No. 1. This prevents the threads from slipping out of place.

Tying the Warp threads to the Warp Beam. After the heddle is threaded, tie the ten thread groups to the warp beam apron as at Figure No. 4 of Leaflet No. 1. To do this, place the heddle on the heddle support with the looped groups facing the warp beam, then tie each group carefully as shown. As soon as these ten thread groups are all tied, turn the handle of the warp beam until the tied warps rest on the back brace of the loom over the warp beam. Put the ratchet on the warp beam so it will not roll forward. Leave the leash sticks in the warp to help keep it straight.

Winding the Warp on the Loom. Untie the place where the loop of the chained warp was tied. Let out a yard or so of the chained warp. Pull the leash sticks forward toward the breast beam 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. If the threads are badly tangled, pull the group, and then loosen it with a snapping motion, as you stand in front of the loom. The heddle may also be brought forward to help with this, but do not try to force the heddle through an impossible tangle. When one half of the warp has been straightened out for a yard or so, do the same with the other half. Then take the left half of the warp in the left hand and the right half in the right hand. Now two people are necessary, one to hold these warp threads as evenly as possible in the front of the loom, and another to turn the handle of the warp beam to wind on the warp on the warp beam. As soon as the warp has been wound around the warp beam once, put in one of the cardboard strips, which come with the loom, right over the place on the warp beam where the knots come. These strips keep the warp smooth and even and should be put in as the warp is wound up. Take care there are no loose threads.

To Keep the Loom Stationary, let the back notch of the loom frame, slip over the edge of a firm table. This helps to keep the loom from pulling forward by the person who holds the warp threads in front, while the person at the back winds it up. Have the warp threads from the edges of the heddle come straight toward the person holding it in front. But let them come from the center of the heddle like a V. Pull these warp threads a little, and keep them just as taut and even as possible, as they are being wound up by the person at the back of the loom. There must be no tight or no loose groups of threads. This is very important. There is no way to fix a poorly wound warp but to wind it over again. If the threads are not even and smooth on the warp beam, it must be unwound, re-chained as this is done, and then wound up again.

As soon as the first length of straightened warp has been wound on the warp beam 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. Be sure the threads at the ends of the warp beam are not looser than the rest of the warp. Continue winding up the threads, inserting a cardboard strip occasionally, until there is only enough warp left to tie to the front cloth beam apron.

Tying the Warp Threads to the Cloth Beam Apron. Cut off the uneven ends and tie the warp in groups of ten threads or so to the front cloth beam apron as at Figure No. 4, on page I of Leaflet No. 1. Tie these groups so the tension on all of the groups and the threads are the same for the width of the warp. Have no loose or no tight threads. When the threads are all tied up evenly across the width of the loom, raise the heddle and insert one of the warp leash sticks in this shed. Then lower the heddle and insert the other leash stick in this shed. This makes a firm foundation to beat against to begin weaving.

How to Beat Rag Weft or Heavy Rug Filler Close to Make a Firm Rug. Raise the heddle, pass weft through shed thus made. Push weft into place with heddle. Lower heddle, put weft shuttle in this shed and taking hold of the shuttle with both hands at each edge of the warp threads, push the previous row of weft down close. Then draw the shuttle with the second row of weft through the shed, push it down with the heddle. Raise the heddle and push the second row of weft close with the shuttle before putting in the third row of weft. If you push each weft row down with the shuttle after changing the shed, it is possible to get a much firmer closer woven rug, especially when using rags.

For further help and directions for weaving many other articles, you can now order from Sears a new instruction book, "Weaving on the Hearthside Loom", by Nellie Sargent Johnson.