

## Rectangle Experiment - Rogers Looms Jan. 2012. Home of Hideaway and Hideaway Homestead brand looms



3 scarves made from rectangle looms with (left to right)  $3/8''$ ,  $5/16''$  and  $1/4''$  pin spacing. All 3 looms had the same number of pins for the width and identical pin count for the lengths. Only the spacing between the nails was different. The patterns created by yarn color changes are different too.

The purpose of this experiment is to find out what pin spacing is best for continuous strand weaving on the rectangle, according to the yarn weight used. Specifically for weaving scarves. I originally made and used rectangle looms with  $1/4''$  pin spacing and did one scarf on a  $5/16''$  loom. Both pin spacing schemes made some nice weavings with several weights of yarn. I used a fairly heavy yarn but didn't have personal knowledge of the exact size, or weight of the yarn. I was told one was worsted weight and the other was bulky, but did not think to see the data on the wrappers myself. I now understand that actual yarn thickness may vary within a stated weight by different manufacturers.

Lately I have made some rectangle looms with the coarser  $3/8''$  pin spacing. I recommend bulky weight yarn for this pin spacing, worsted weight at least. When taken off the loom, the woven material done the CSW way will stretch lengthwise, the more space between the yarn strands, the more it will stretch out. The finer the yarn, the more space between the strands. So with too fine a yarn, the fabric will be "loose" or unstable to the point you could stick your finger through it. Knitting or crocheting will result in a fabric that stays more or less exactly as created, continuous strand weaving with too much open space between the strands will allow movement of the strands and openings can develop. Some yarns might be better at clinging to

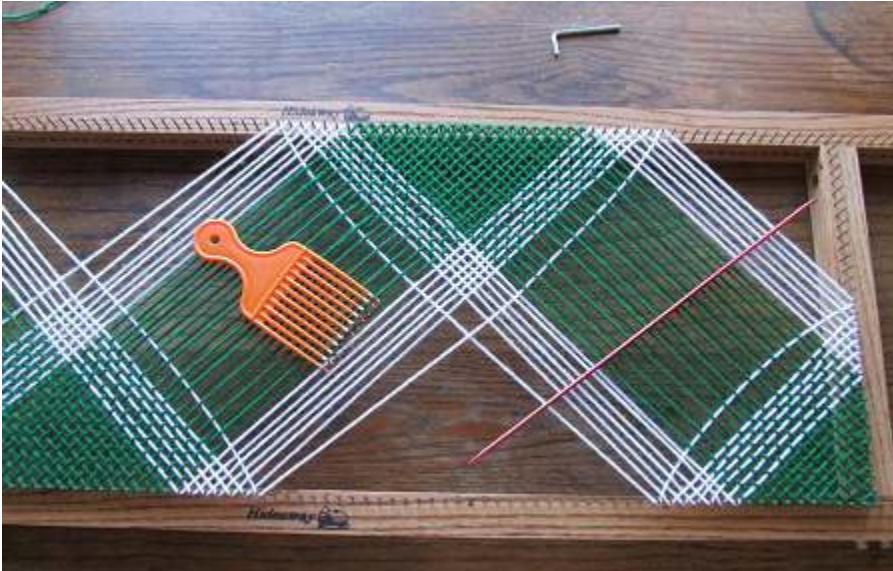
each other so I am not saying some 'open' weaves aren't possible. Blocking or fulling works to improve weavings made with some natural fibers. I am experimenting with acrylic fibers here at this time, yarn that is uniform for all 3 tests.

Several things led me to re-think the pin spacing I really want to use on my looms. One, I found a good new way to attach the movable rail on my modular loom. That construction plan works well for coarse spacing but it is difficult to use for fine spacing like 1/4". Second, it seemed that the 3/8" spacing was too coarse. So I started thinking about the 5/16" loom that I once used, and how it could serve as the one and only pin spacing for my future looms. I am now working on a way to make adjustable loom in fine sett too.

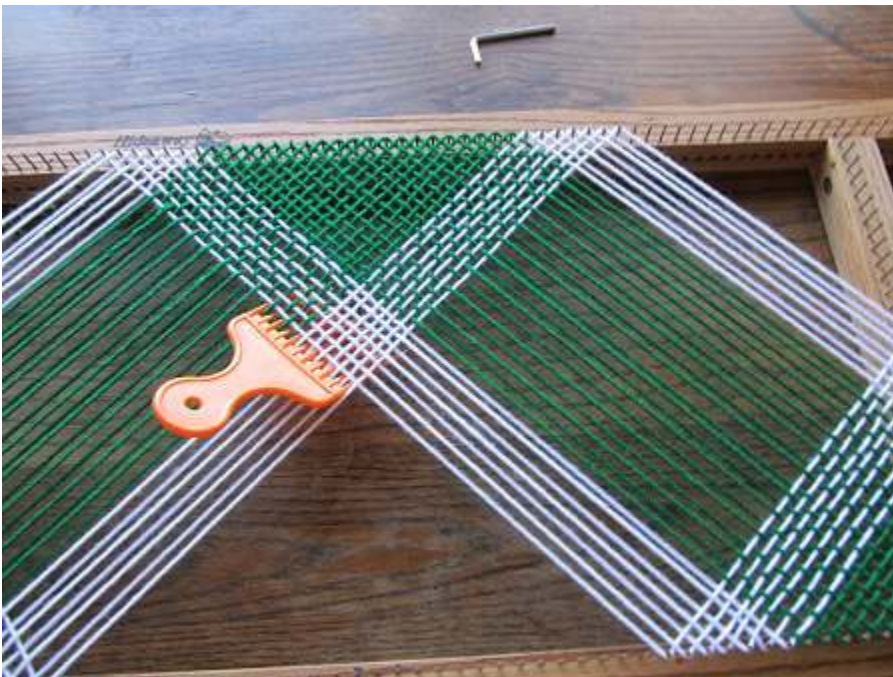
### **3/8" pin spacing.**



I started with a 3/8" spacing loom and worsted weight acrylic yarn. This also is an experiment to see how it works to join two halves to create a longer scarf. The loom has 32 pins on the end, and is 3 squares long. When joined the scarf was 6 squares long, or approx 12" wide by 71" long. The scarf was too long, and I am not satisfied with the appearance of the join. Photo shows how I could sit down and move the loom in front of me to get the best angle for weaving the 14" afghan crochet hook through each set of warps. Of course you don't pre-warp CSW, but 'warps' appear as you proceed with the process. The yarn skein sits in the bowl below the left end of the loom and feeds a continuous strand of yarn from the left end.



It is important not pull the yarn too tight when weaving. Just as in triangle CSWeaving, the weaving gets tighter as more strands are added. This results in more difficult weaving towards the end, and a finished product that shrinks more when taken off the loom. To help keep the yarn tension loose, you have to weave loosely from the start. One tip: Leave the yarn in an arc before packing it in with the comb. This results in relieving some yarn tension when the arc is made into a straight line. Towards the end there is less space for these 'arcs' so if not woven loosely to start, there is not much that can be done later. Below: arcs straightened.



When taken off the loom the weaving will equalize so you don't need to be too picky about straightness. Most important is keeping the yarn straight so there is a uniform open space for the last few loops and the final single strand has room to be woven in place. That is when the yarn is the tightest.



On this project I added and trimmed the fringe after taking the halves off the loom. The only fringe that needed trimmed was the single starting yarn end and the two double yarn ends where I made the color splices. The pattern here results from changing yarn each 1/3 of the loom end. The color squares are large for the first color, small for the second color. For the next project I will add and trim the fringe while on the loom, where it is easier to find the yarn turns where the fringe is tied.

## Finer 5/16" pin spacing



Same work set-up. Even though this loom is full length, I was able to slide it back and forth to get a comfortable work space while sitting at the table.

You can see that the hook is only woven through about half of the weft at a time at this

point in the weaving, as it is too far to get done in one shot. Near the finish of the weaving, when it is tighter, 3 or more runs might be necessary to have less wear on the final single strand. The goal here is to see if we can have a better fabric by having less space between the yarn strands.

The loom has exactly the same number of pins on the width and length (32 x 190 pins) as used for the first weaving, but due to the finer pin spacing, the rectangle dimensions are smaller, approx. 10" x 59". This project will use slightly less yarn.



This is a good photo showing how the fringe is tied. I pull the fringe loop up through with the hook. I cut the yarn in 12" lengths by wrapping it around a piece of wood 5.5" wide, in multiple wraps; then cutting the wraps all at once with scissors. You leave the yarn ends at the starting yarn and the color changes a little long so that they will match the other fringes when trimmed.

Next page, 1<sup>st</sup> photo: ready to take off the loom, fringes tied and trimmed at both ends. The only other thing to remember is to tie the starting and finishing ends in an overhand knot into the closest cross weave. This pattern results from first weaving 1/4 of the way down the end with one color, switching to the alternate color for 2/4 more, then returning to starting color for the last 1/4. The colored areas on the scarf are almost perfect, uniform squares. Or diagonals depending on your perspective.

Next page, 2<sup>nd</sup> photo: taking it off the nails. Once the end and a little down one side is helped off with the hook, the remainder lifts off easily.



Above: Showing the scarf width compared to the pin loom it was created on. See how it compares with the photo above it with the weaving still on the loom. Had I woven a little more loosely, the scarf might have been even wider due to less tension on the yarn while on the loom. In other words, it would have 'relaxed' less if the yarn wasn't so tight to begin with.



The two scarves compared. The first scarf, done with the coarser 3/8" pin spacing, is on the left. It was done on a longer and wider loom, but now appears narrower and wrinkled compared to the scarf on the right. The edges tend to curl up. I think this curling would not happen with more expensive natural yarn. The color pattern is stretched out so the squares are elongated. The scarf on the right has the feel that I expected, and is an inch wider in appearance than the other one, even though the loom it was woven on was 2 inches narrower. It used less yarn, 3.2 oz. compared to 3.8 oz. for the scarf on the left, due to the physical width and length difference. Since each loom had the same number of pins on the width and length, there was exactly the same amount of weaving work done. The difference in the fabric is the closeness of the yarn strands, which hold the fabric shape. Better results would be had on the coarser loom with fatter, bulky weight yarn.

I was interested in experimenting with worsted weight yarn because it seems to be more universally available than bulky weight. Colors chosen for these experiments based on the only 2 colors I have at this time, in yarn of a weight that I know for sure. It is Caron Natura worsted acrylic yarn.

I will 'block' these scarves to see if it makes a less wrinkled appearance, although with acrylic fiber it might not. I will do the other, 1/4" spacing experiment, then post photos here with the results, before and after blocking all three experiments. With wool, gently washing or wetting the scarf, then laying it out, spread out in the proper shape to dry would cause the fibers in the yarn to cling where they crossed and the fabric would hold its shape.

### **1/4" experiment - worsted weight yarn**

I made a scarf with the same yarn on a loom with 1/4" pin spacing. See the photo on the first

page. It did improve the appearance of the scarves to wet them, squeeze them out and then lay on a towel to dry smoothed out. The 1/4" spacing was harder to weave even though I tried to weave very loosely. It took more attention to pack strands straight as the yarn was crowded. More importantly, the fabric is stiffer and may be not so pleasing for a scarf.

### **Conclusions**

The 1/4" spacing was difficult to weave with worsted weight as I had to put a lot of pressure on the comb when packing in the strands to get them straight. Also the finished fabric was too rigid for a scarf, IMHO. With a sport or DK yarn weight, it might be OK. This would be the best spacing for fine homespun yarn.

The 5/16" spacing was easy to weave with worsted yarn, and the scarf was soft and pliable. Thinner yarn might still be OK, heavier bulky yarn might be too thick.

The 3/8" spacing might be good for worsted weight yarn after all, making a coarser textured scarf. Also easy to weave. I can say that with bulky or super-bulky yarn, you could get a different result. Easier to change your yarn than change your loom. You can use two yarns together to get a tighter weave as shown here using the 3/8" pin spacing loom.



I did not pursue making economy rectangle looms made of a solid board for sale. Maybe this information helps someone make a loom for themselves. Or to understand how to get the results they like with a rectangle loom.

You can make a loom with a solid board without a lot of trouble and expense. I plan on making the Hideaway Pin Arrangement formula available so you can get a 'perfect' weaving outcome with a continuous weaving method for the rectangle. Email [rogerslooms@msn.com](mailto:rogerslooms@msn.com)