

# warp and weft

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January, 1977

## warp and weft

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### A WORD FROM THE EDITOR

Here is the beginning of another year, and believe it or not, February will see us start the 22nd year of our publication of Warp and Weft. It doesn't seem possible that this much time has passed, and that we are still continuing with this.

And besides Warp and Weft, our multiple harness bulletin, Drafts and Designs, will also be in its 20th year of publication.

All this goes to show one thing. And that one thing is that I enjoy being in the business I am in, and I feel so lucky that all three of us, Janice, Robin, and myself have been so involved with this business this length of time. I know that many persons do not enjoy the work they do in order to make a livelihood, but I am so fortunate that I do. It is an exciting adventure to me everyday when I go to work, because there is always something different. There may be new yarns coming in, a new book to look at and read, and yes, besides these pleasant things, there are problems to be solved, decisions to be made, and of course, bills to be paid.

Today is the day before New Year's, and everyone is off today but your editor. It is so unusual to be here and have some time to myself, and to write Warp and Weft like this without too much interruption. I've even gotten in the habit of taking Warp and Weft home with me and working on it in the evening, as then there are no interruptions. And, I enjoy this work at home also, as much as I do at the shop.

Away from this, to tell you that we have 3 shipments of yarns due in here this month of January, 1977, and we will have some exciting yarns to offer, and we hope that we will make

many garments or fabrics from these that will be of interest to you.

I have been giving serious thought to once again expanding our shop, but just wonder if I should get that much more involved again. We could use the room for both display of yarns, and also storage of yarns, so perhaps this year of 1977 will bring new and interesting changes to Robin & Russ Handweavers. What do you think? Should I expand? Or should I stay the same? I'd like your reactions, you subscribers who might be interested. Drop me a line and let me know your ideas on the subject of expansion.

Now back to this month's sample. It is one that your editor designed himself. I wove a sample swatch with many different colors in the warp and weft, but we all seemed to like this one that is the sample of this month's issue. One of my favorite jobs here in the shop is the weaving of samples, and lately, I've not had much chance to even do this. But, I always do jump at the chance to experiment, and see what happens with the crossing of different colors, textures, and weights of thread. This month's sample is so simple, and the design is nowhere near as complicated as it looks. And easy to weave, this is one of those that you should all enjoy doing.

While in England last September or October, I interviewed a girl who was a graduate of Bradford College, Textile Division, and we are working on having her come over to the U.S.A. to work for us for a couple of years. I never thought it would be so complicated a task to do this, but it has turned out to be more of a task than anticipated, and we had hoped that she might be here in January of 1977. However, it now looks as though it depends upon immigration visas and work permits, and so until these are approved, and the requirements are met, this project seems to be delayed. Perhaps February will be the magic month for Maria C. Heath, instead of January. I saw much of her work that was done in 3 years of textile study in England and was so impressed with her work that I knew she could do a full time job for us, helping design and weave projects for both Warp and Weft, and Drafts and Designs. I only wish that we had more of this type of training available here in the U.S.A., and that I was 20 or 25 years younger and would be able to have such training.

One of our friends here in McMinnville was a textile designer for a woolen mill here, and his training was in England. So, he suggested

we visit the school that he took his training in, in England. This I did, and it was such a great pleasure to see how thorough the 3 years of training was. The students learn everything about textiles from the manufacture of the thread to the finished garment, and so this is something I had always wished that I had. They were so kind to the two of us who visited the school, and spent almost the whole day showing us around, and explaining the many different by-ways of the textile industry to us. And since then, I've made friends with Mr. Jack Womersley, who teaches in another such school. Every year, it is a pleasure to go through this school and see what is in progress. This year while there, I saw a new, beginning class with their first ventures in non-loom weaving, or weaving on frame looms of picture frames. It was so pleasing to see the student's ideas and their expressions of their ideas in the frame-loom weaving.

Enough for now, and back to this month's sample.

Russell E. Groff, Editor

#### **THIS MONTH'S BOOK REVIEW:**

Many different issues in the past have sold of the activities of Paula Simmons, who has been breeding and raising black sheep for about 20 years, and who has written many excellent articles which have appeared in *Warp and Weft* on the subject of hand-spinning.

Well, Paula Simmons has done herself proud with a new book, entitled: **RAISING SHEEP THE MODERN WAY**. This book is or was written because of the tremendous increase in interest in hand-spinning, and because many of the hand-spinners are interested in their own source of wool. This book is intended to help those who will have small flocks of sheep, or just a few sheep, rather than those with the larger flocks of 10 or more.

There is so much content in this book that even I, who am not interested in raising sheep, found it most interesting. Much of the content of this book is based on the experiences of Ross and Paula Simmons, but much of it is also very technical and interesting information from sheep breeders, from experimental sheep farms in the U.S.A. and New Zealand, and many other sources, so it is an excellent compilation of facts for all of those who are interested in

having a small flock of sheep.

Paula starts by suggesting how to start your flock, and what to look for when you buy your first sheep. She makes it both interesting and educational. She has a section on the many different breeds of sheep, and tries to help you decide what would be best for your situation.

And then the rest of the book is filled with 1001 ideas for the care of sheep, discussing their pasture, their feed, their medical care, diseases that they can get, what problems you will have with the ram, the proper procedures in breeding and lambing and many other items are well covered.

And throughout the books there is a plethora of pictures, of drawings of all kinds, and sketches to help you in the raising of your small flock of sheep.

There is a complete section on the birth of lambs, their care, what you must watch out for, their feeding, and other problems one must solve. I've not raised any sheep, but from looking at the book, I would say that there were almost no problems not covered by Paula Simmons in this care and raising of small flocks of sheep.

There is a good section on the shearing of the sheep, with step by step pictures. There is a section on raising these sheep for food, and many recipes for the proper use of lamb or mutton in your cooking.

She mentions 14 different ways that you can make the raising of sheep a profitable experience, and goes into detail about all of these. Chapter 20 of the book is a sheep calendar telling when it is time to breed them, when it is lambing time, when it is time to give them supplemental feeding; when it is time to shear the sheep, and she finally ends her books with a source of sheep raising supplies, and what you may need in each of the various problems that might come up in the raising of these sheep.

This paperback edition seems to be an excellent book on the subject, and I'd recommend it highly.

Here's what you can learn from this book. You can learn what sheep to buy, and why. You can learn how to feed and care for them, how to fence them in, how to keep them healthy, and what to do when they are not healthy.

Besides this there are many extra subjects covered in this book. You can learn many ways to cook the meat; have a step by step photographic lesson in shearing of the sheep, and see photographs and descriptions of many  
(Continued on page 5)

## INDIAN TURQUOISE

We thought this fabric would look good with Navajo turquoise jewelry which is so popular today. The close sett of the 2/12's worsted - 30 ends per inch - makes a very firm, durable, high quality fabric that would make up very well into a tailored women's suit, skirt, jacket or dress. And the design, while a very original twill color variation, has a classic quality that will survive through many years of fashion trends.

### THREADING DRAFT:

4	0	0	0	0	0	0	X	0	0	0	0	0	0	X
3	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	0	0	0	0	0	0	X
1	X	X	X	X	X	X	X	X	X	X	X	X	X	X

### KEY TO THREADS USED IN THE THREADING DRAFT:

X = 2/12 worsted Blue Green #36  
 O = 2/12 worsted Light Turquoise #4

### WARP THREADS USED:

The warp was made up of 2/12's worsted in two colors, Blue Green #36, and Light Turquoise #4. The 2/12's worsted comes on 8 oz. cones and is available in 22 colors.

### WEFT THREADS USED:

The same threads that were used in the warp were also used in the weft: 2/12's worsted in Blue Green #36 and Light Turquoise #4.

### REED USED:

We used a 15 dent reed and sleyed it two ends per dent, giving us a sett of 30 ends per inch.

### TREADLING SEQUENCE:

There are 28 shots to one complete pattern repeat.

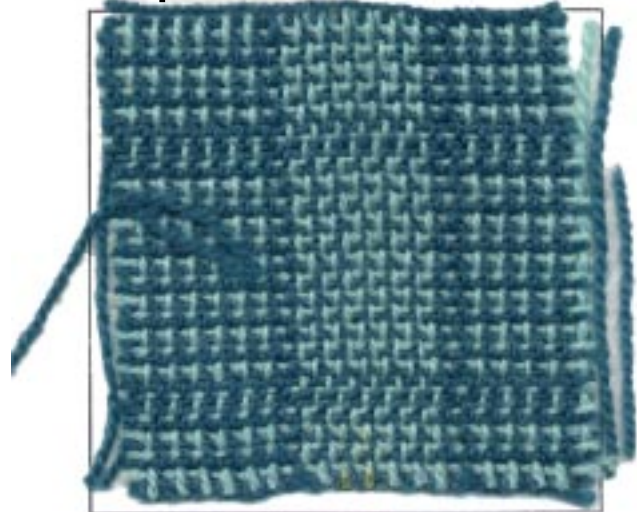
1. Treadle #1 - 2/12 Light Turquoise
2. Treadle #2 - 2/12 Blue Green
3. Treadle #4 - 2/12 Light Turquoise
4. Treadle #3 - 2/12 Blue Green

### TIE-UP DRAFT:

4			0	0
3		0	0	
2	0	0		
1	0			0
	1	2	3	4

O—tie-up for jack-type loom.

### Sample



5. Treadle #1 - 2/12 Light Turquoise
6. Treadle #2 - 2/12 Blue Green
7. Treadle #4 - 2/12 Light Turquoise
8. Treadle #3 - 2/12 Blue Green
9. Treadle #1 - 2/12 Light Turquoise
10. Treadle #2 - 2/12 Blue Green
11. Treadle #4 - 2/12 Light Turquoise
12. Treadle #3 - 2/12 Blue Green
13. Treadle #1 - 2/12 Light Turquoise
14. Treadle #2 - 2/12 Blue Green
15. Treadle #4 - 2/12 Light Turquoise
16. Treadle #3 - 2/12 Blue Green
17. Treadle #1 - 2/12 Light Turquoise
18. Treadle #2 - 2/12 Blue Green
19. Treadle #4 - 2/12 Light Turquoise

- 20. Treadle #3 - 2/12 Blue Green
- 21. Treadle #1 - 2/12 Light Turquoise
- 22. Treadle #2 - 2/12 Blue Green
- 23. Treadle #4 - 2/12 Light Turquoise
- 24. Treadle #3 - 2/12 Blue Green
- 25. Treadle #1 - 2/12 Blue Green
- 26. Treadle #2 - 2/12 Light Turquoise
- 27. Treadle #3 - 2/12 Blue Green
- 28. Treadle #4 - 2/12 Blue Green

This is the end of one complete pattern. Repeat over and over as desired.

**ABOUT THE FABRIC:**

This was such an enjoyable fabric to weave. The finished yardage gives the impression that it is a rather complicated threading and treadling, but the pattern is actually formed by the different sequences of color; the threading is just a straight twill and the treadling is very simple and easy to keep track of. It was easy to maintain a nice comfortable rhythm which made the weaving speedy and enjoyable. I wove the samples using the tie up given here, but if you want to, you could interchange treadles #3 and #4 so that it would be a straight walk left to right for most of the pattern and then treadle #1, treadle #2, treadle #4, treadle #3 for those four different picks of the pattern repeat.

I had hardly any breakage in the warp. One or two selvage threads broke a couple of times, but that was all. The occasional knots in the warp stuck in the reed and had to be joined with fabric cement.

I did have some problem with the warp clinging together. Thirty ends per inch is a rather close sett for the 2/12's and the warp stuck together alot especially going from treadle #2 to treadle #4, which is a complete change of warp threads. The most helpful remedy was to not advance the warp too much. When the weaving line was closer to the breast beam it was alot harder to separate. I used a firm, even, double beat, once with the shed open and once again after changing the shed. This second beat also helped to clear the shed. You might like to try this fabric with 2/18's worsted, using the same sett. This would eliminate the clinging problem, but the finished fabric would not be as firm.

The fabric measures 39" wide off the loom, so it took up 3" off the 42" warp. Washing will shrink another inch off. You should hand wash

your yardage before it is made up. We put a 12 yard warp on the loom and ended up with 10 yards 29 inches of finished fabric, so 1 yard 7 inches was taken up in weaving and lost to loom.

**COST OF THE FABRIC:**

We used 3 lb. 12 1/2 oz. of Blue Green #36 2/12 worsted in the warp and 1 lb. 12 oz. of Light Turquoise #4 2/12 worsted. The warp was 42" in the reed and 12 yards long. The 2/12 worsted is \$9.60 per pound, so the total warp cost was \$53.10, or \$4.43 per yard.

In the weft we used 1 lb. 5 oz. of Blue Green #36 2/12 worsted and 1 lb. 2 oz. of Light Turquoise #4. 2 lb. 7 oz. at \$9.60 per pound is \$23.40, which works out to be \$1.95 per yard.

WARP COST PER YARD .....	\$4.43
WEFT COST PER YARD .....	\$1.95
 FABRIC COST PER YARD .....	 \$6.38

**Book Review** (Continued from page 3.)

many different breeds.

And the thing to recommend this is that Paula Simmons and her husband Ross have been raising black sheep, breeding black sheep, shearing, spinning and weaving the wool for 20 years on their farm in Washington. Her husband Ross read the manuscript of this book, grinned at Paula in approval and asked, "Where was this book when we really needed it 20 years ago." So, you can see why I give it my heartiest recommendation.

TITLE: RAISING SHEEP THE MODERN WAY  
 AUTHOR: Paula Simmons  
 PUBLISHER: Garden Way Publishing  
 PRICE: \$5.95 plus shipping.  
 AVAILABLE: Available from Robin & Russ Handweavers

**THIS MONTH'S COVER PHOTOGRAPH:**

These very striking belts can be made by several different ways. They could be a loom or harness controlled project if you have enough harnesses. Or they can be a piece of A GUATEMALAN BELT WEAVE, or it could be strictly a pick-up weave if you wish to call it that.

There is an excellent description of this technique in Mary Atwater's book entitled "BYWAYS IN HANDWEAVING," with pictures and descriptions of how to do these weaves. And of course a contrast of color is very important in this weave, and you can see from the photograph, how much contrast there was in the threads used in this sample.

I believe that these pieces were on display at the Southern California Hand-Weavers Conference in San Diego, California earlier this year. If you know who the weaver was, please do let us know and we will share it with you in the next issue.

**SILK, THE MAGIC FIBER.**

During the past couple of months we've come across several interesting articles on silk. There is so much information that we might have to spread it out over two issues instead of just one. Hope that you enjoy reading about this most interesting series of articles.

**THE MAGIC YARN**

We thought you might like to hear a little about the history and manufacture of the most elegant, versatile and fascinating of all yarns - silk, the magic yarn.

The Chinese were the first to discover the method of raising silkworms, unwinding the filament from the cocoons and preparing and weaving the silk into the most lustrous fabric known. The discovery is thought to have been made at least two thousand years before Christ by the Empress Si-ling-chi, wife of the third Emperor of China, and the word silk is probably derived from her name. For over two thousand years the Chinese kept it a secret as to how the silk was obtained. Chinese laws punished by death any person who attempted to divulge the processes or to export any mulberry seeds or silkworm eggs. Silk textiles were exported all over the civilized world, highly prized and at times literally worth its weight in gold.

There were many speculations in the west as to the origin of the fiber. The most widespread belief was that it was a kind of fleece that grew on trees. Others thought it was processed from plants like cotton, or carded from leaves or

flowers. Eventually, however, the secret of the manufacture of silk began to leak out of China, first to the Japanese, who kidnapped some experts in the art and forced their knowledge out of them. In about 419 AD a Chinese princess who was to marry a prince of Khotan carried silkworm eggs and mulberry tree seeds concealed in her head-dress, and so began the industry in India. The industry never became as successful, however, because the Mohammedan religion forbade the killing of the worms in their cocoons, which results in broken strands of silk, and thus a lower grade of finished fiber. About 550 AD, two monks who had travelled East to spread the Christian faith smuggled back eggs and seeds to Greece. From there the knowledge slowly spread into Southern Italy and Spain and much later (14th century) into France. Always highly popular with royalty, the court of Henry III of England (1251) was dressed in silk, and Queen Elizabeth I and her court are said to be the first to wear silk stockings.

Efforts to establish a silk production in England were unsuccessful, mainly due to the climate. The largest production of silk in Europe from the 16th to 19th centuries was in France. The worms were first raised in the many castles and abbeys in the south and center of France and in Paris and later in specially built nurseries. In 1849, however, a severe disease broke out among the worms, which had a devastating effect on the whole European silk industry. M. Pasteur began to study the problem in 1865 and developed the process of cellular incubation which was established in all French nurseries by 1875. This process involves the isolation of the couples so that the females lay their eggs on separate pieces of cellular cloth to be examined by microscope. During the period of the disease, however, much interest in the industry had been diverted, the mulberry trees neglected and the French silk industry never did regain its former volume.

Attempts were made to establish a silk industry in colonial America, aided by the immigration of skilled silk workers from France and England. The first silk mill in America was erected in 1810 in Connecticut. Many others were attempted, in the Midwest, West, and South, but apart from the considerable industry of Scalandre Silks Inc., of Paterson, New Jersey, started in 1927, there has been no major silk industry established in this country.

Today, Japan, Thailand, Italy, and France are the leading producers of silk.



## CLASSIFIED ADVERTISING

Why not advertise your old loom, duplicate equipment, and other such items in this section. Price per 5-line ad is \$5.00. Payment to accompany your advertising copy.

**BEAUTIFUL WHITE TRAM SILK IN SKEINS.** Quite often you will find a beautifully colored silk in skeins, dyed in colors, called a Tram Silk, which has a high luster. This is the same type of silk, only we have had it slightly plied with 3 or 4 ends so it can be used for a warp thread for the handweaver. The only problem is that we could only get about 20 lbs. of this beautiful, white, glossy or shiny silk, and it is available in skeins of 3 to 4 oz. each. This silk is about the weight of a thread between a 10/2 and a 20/2 cotton, and has a slight texture. Price is \$16.00 per lb., or \$1.00 per ounce. Could probably be an excellent warp if warped on the loom via sectional warping. May be a problem in a chain warp, as it does not have too tight a twist. Just 20 lbs. available, and price is \$1.00 per oz. Skeins are 3 to 4 oz. ROBIN & RUSS, 533 N. Adams St., McMinnville, Ore. 97128.

**DRESSING THE LOOM,** by Ida Grae. Do you warp your loom using a warping mill? If you do, you will find that this outstanding little book will be a great help to you. The step by step pictures in this book are well worth the price of the book. And the layout and pictures of this book are clear and concise, and seemingly, no details are omitted. You'll like DRESSING THE LOOM, by Ida Grae. Price is \$5.00 plus postage. ROBIN & RUSS, 533 N. Adams St., McMinnville, Oregon. 97128.

**7/1 BLACK DOUPPIONI SILK.** This silk is in skeins, and we are just starting a Drafts and Designs project using it for warp, at 20 per inch. It is an excellent weft thread either single or doubled. Has approximately 5600 yards per lb., comes in skeins of 4 to 8 oz. each, and is most reasonably priced at \$6.00 per lb. We have about 200 lbs. of this one available. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**7 DIFFERENT KINDS OF WOOL CARDS.** Yes, we have all 7 of these in stock. We have the copies of the Finnish Wool cards, which are our best seller at \$13.50 per pair. We have both fine and coarse wire wool cards from Canada. We have an excellent pair of wool cards from Australia, we have three different sizes in the heavy duty American wool cards. We have cards for carding cotton. And, we have two or three other kinds, sample pairs on hand. Write for our free spinning supply sheet. All of these wool cards on hand. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**HEAVY GERMAN RUG WOOL WITH JUTE OR LINEN CORE** We have an extremely heavy one with about 16 yards per lb. in 7 different colors, and we have a finer weight with about 65 to 75 yards per lb. in about 5 colors. The price is high, \$12.00 per lb. for the heavier, and \$14.00 per lb. for the finer, but the quality is there. Free samples of either on request. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**HALF-MOON BAMBOO BAG HANDLES** These are just in from Switzerland, and we have them in 12" size and 10" size, with the rods removable so that you can put different bag bottoms on the same handles. First time we've been able to get these in 2 years. \$6.95 and \$7.95 for the larger size. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**SPECIAL INVENTORY SALE TO START IN MARCH.** As of March 1, 1977, we will have on sale at 1/2 price, about 25 different yarns, that we can no longer repeat from the manufacturer. Free sample sheets upon request. Most of these will be on sale at \$1.60 per lb. to \$2.00 per pound instead of \$3.20 to \$4.00 per lb. We have limited amounts of all of these, and as the manufacturer has gone out of business, we would like to close them out. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**ANYONE CAN BUILD A SPINNING WHEEL.** We have this little booklet in stock at \$1.50 plus postage. It gives you the complete details for making your own, inexpensive spinning wheel. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**GHIRARDELLI SQUARE BERBER WOOL.** We have this in stock again in a slightly different color than previously, but it is a very attractive wool blend yarn. Price is the same \$4.80 per lb., and we have just 100 lbs. of this lot. Available on 1/2 lb. tubes. About 400 to 450 yards per lb. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**24/2 MERCERIZED DURENE COTTON, NATURAL.** On 3 lb. cones, we have it on sale at \$3.20 per lb., if you purchase it by the cone. The cones seem to range in size from 2 lbs. 12 oz. to about 3 lbs. 2 oz. in weight. A good buy at this time, and an excellent warp thread, as well as a weft thread. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**SIZE 30, or 40 or 50 ITALIAN LACE THREAD** This is an extra high quality thread, beautifully spun and twisted tightly for bobbin lace. 50 gram skeins are \$3.50 each in the natural or bleached white. We have natural in size 30 and size 40, and white in all three sizes. Has been the mainstay of the bobbin lace industry in Italy for many, many years. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**HEAVY, HEAVY, SINGLE PLY BERBER IN FOUR COLORS.** A good price for this heavy weight yarn. It is \$6.00 per lb. There are two darker brown blends, a natural and tan blend, and a natural with flecks. Probably about 75 to 100 yards per lb. It came to us on 10 lb. cones, but we will wind off by hand 1/2 lb. or more for you. Free samples upon request. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**COMMERCIAL YARDAGE COUNTER FOR SECTIONAL WARPING.** This is about the best quality warp measurer I have ever seen, and it is used in the textile industry all over the world. It has a quick reset, and you can push a lever and set it back to zero. Has a lever or digit to measure 1/10's of a yard, and will measure up to 9999 yards per spool. Made for use in industry, we have had it adapted for use by the handweaver. Can be used in combination with either an electric or hand bobbin winder. Price is \$75.95 for this excellent warp measurer. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**HANDSPINDLES FROM ENGLAND,** \$1.50 each.

**AMERICAN HAND SPINDLES.** \$2.00 each. And we have sold 100's of both of them. Price is so reasonable, but shipping is extra. In stock all the time. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**NIDDIE-NODDIES** We have an excellent hard-wood, heavy duty niddie-noddie in stock all the time. Price is \$8.95 plus postage, and it has the advantage of being made so that if you pull out a pin, it will turn and lie flat. Do try one out. You'll like it. Shipping extra. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

**6 & 8 CUT COMBINATION COTTON & RAYON CHENILLE.** We have this available on 1/2 lb. tubes, in about 25 colors. Price is \$2.00 per 1/2 lb. tube. Write and ask for free samples. Some of these are a combination of cotton and rayon, and others are all rayon. ROBIN & RUSS HANDWEAVERS, 533 N. Adams St., McMinnville, Oregon 97128.

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Compact Folding <b>NORWOOD          LOOMS</b>	Five Widths 16" — 22" — 30" — 40" — 50" Made of Cherry <b>The Norwood Loom Co.</b> <b>P. O. Box 167</b> <b>Fremont, Michigan 49412</b>
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10 MAPLE, 46" Oregon Trail Looms in Progress will be available on about March 1, 1977. 1380 large eye heddles and choice of reed with each loom. \$650.00 plus crating and shipping.

Write for more details.

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