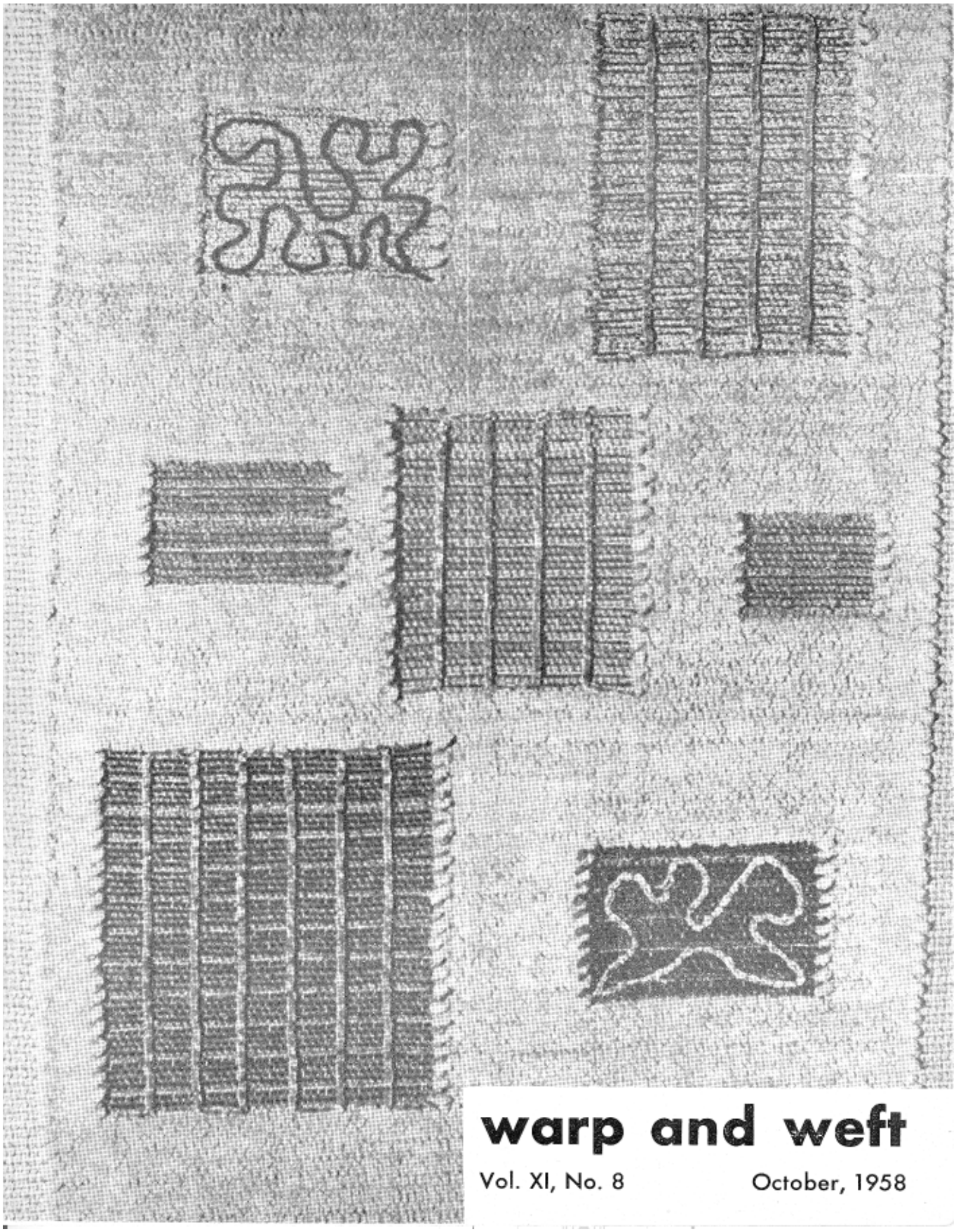

warp and weft

Vol. XI, No. 8 October, 1958

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Editor: Russell E. Groff, 632 Santa Barbara St., Santa Barbara, California.

Assistant Editors: Robin Groff and Frederick Brown.

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A Word from the Editor

Back on schedule again, we hope, now that vacation is really over ,and the weavers are again settling at their looms, we notice the miracle that we annually see, a revival of all hand crafts, not only weaving.

Our adult education night school weaving class will start tomorrow, and already a tremendous interest has been noted.

Visitors from the east have kept us busy in our spare time, showing them what we consider to be the important and beauty spots of California.

And believe it or not the wall in our front yard at home, the one behind our shop and the one behind our home, are all within just hours of completion.

The ocean has been our playground after work this past week, and at 5:30, our visitors, Janice, Robin and I have been taking our dinner to the beach, and before eating, we've been enjoying a half hour to an hour swim. Riding the breakers is particularly enjoyable, and we have found a beach that seems to always have the large breakers or waves that are just perfect to ride as much as 75 to 100 yards to shore.

And yet, even though we live a mile from the ocean, it takes visitors from the east to get us there.

Weaving again, and we've heard that Malin Selander, the author of the book, "Weaving Patterns", which was translated into English, will have a new book out as of the first of the year. We're looking forward to it.

And my visit back east to Z Handcrafts will be mentioned more extensively in our next issue. It was certainly a worthwhile trip in terms of weaving, but more about this next time.

Our multiple harness bulletin is progressing nicely, and we're pleased to see the response that we've had to it. We had many suggestions for names, and somehow they didn't seem to fit as we wanted them to. So—we made up our own name, and even though we are still not quite satisfied with the name we did give the bulletin, we will go along with it. The name that we are using now is: "DRAFTS AND DESIGNS", A guide for weaves of 5 to 12 harnesses.

Enough for this time.

RUSSELL E. GROFF, *Editor*

This Month's Cover

The name of the wall hanging on this month's cover is "Plowed Fields", and we think that it is a very apt name.

It was woven by Mrs. Clara B. Martinie of the Carmel Crafts Guild and was displayed at the Northern California Handweavers Conference this past May.

Mrs. Martinie told us that this was the result of a trip from Carmel, Calif., to the Yosemite country in the springtime. She came home with two definite impressions, and one of these was that of the straight lines and angles of the plowed and fallow fields of the San Joaquin Valley, looking down from the valley side of Pacheco Pass.

The wall hanging was woven on a counter-balanced loom, and was very interestingly done. However, it would take quite a bit of space to describe all the details, so let us just say that I felt that it was one of the outstanding pieces on display at the conference. Our thanks to Mrs. Martinie, who sent us all the details.

THE STORY OF RAMIE

Ramie (Bohermia Nivea) is a fibrous plant of the Bast family. It is propagated by the planting of root slips. From then on, it grows like asparagus, about one inch per day during its growing season.

Best results are obtained by cutting the stalks when the plant reaches a height of about 60 inches. Thus, in Florida, for instance, where some 18,000 acres are under cultivation, three crops are harvested each year: in May, August and November, for a total yield of approximately 2,000 pounds of decorticated fibre per acre. It is interesting to compare this with cotton yields of about 400 lbs per acre.

The usable fibre in a Ramie stalk lies immediately beneath the outer bark and surrounds a center core of woody pith saturated with sticky gums and waxy substances which extend into the fibre itself, making it difficult to handle.

The first step in processing is termed DECORTICATION, which consists of separating the outer bark and the woody core from the usable fibre, without injuring or rupturing the fibre.

To accomplish this end, a decorticating machine is employed; and this first operation occurs adjacent to the growing field, usually in an open shed or barn.

There are several types of decorticators in use, but it is generally conceded that the only one which accomplishes completely satisfactory results is the "NANJER" decorticator invented and patented by Mr. S. L. St. John, a textile engineer of long standing.

This process consists of passing the freshly cut stalks between grooved rollers which have the grooves so arranged as to angle that, in addition to crushing the stalks, they manipulate them sidewise, completely isolating the fibre while eliminating the bark and core as refuse.

The fibre is then treated with a soluble penetrating-softening oil which prevents the remaining gum and wax from hardening in the fibre. It is then hung in the sun to dry out the excess moisture before it is baled and shipped. Many growers do not bother to oil the fibre before baling, resulting in untold difficulties in handling after the fibre reaches the mill.

Upon arrival at the mill, the next step is DEGUMMING, which entails the complete removal of all the sticky gum and wax from the fibre to ready it for the picker-carding operation. It is this step in operations that determines to a great extent the ultimate resuls in successful spinning.

Practically every mill has its own ideas for the conduct of this operation, aimed mainly at conserving time and man-hours. In Japan for instance, where the cost of man power is at a minimum ,they place the fibre in open vats, keeping it in strict parallel to avoid tangling. They wash and re-wash it many times, using an alkaline detergent solution with intermittant rinses until all the "goop" is removed and the fibre is clean and pliable. They then hang it in the sun to dry. The results of this method are highly successful and unsurpassed, but such an operation in this country would be too costly.

On the other hand, literally millions of dollars have been poured down the drain in efforts to find a short cut to success. Pressure kiers, such as are being used for boiling out cotton, have proved unsuccessful by reason that the Ramie fibre, while under pressure, is still impregnated with gum, and channels and mats. Thus results are uneven.

The method developed by Mr. St. John, after many experiments, results in a clean fibre without an excess of time or man-hours. The ramie is degummed in 1000-pound dry-cleaning tumbler washers at 200 degrees F.,

(Continued on Page 6, Col. 2)

KING COTTON:

An all cotton bed-spread, featuring 3 different kinds of cotton thread all in the same project. This material would have many other uses ,than the bedspread that we made.

REED USED:

A 10-dent reed was used with 4 threads in each dent, 2 of 10/3 cotton and 2 of 20/2 cotton, making a total of 40 ends per inch.

TIE-UP DRAFT:

4				X	X	X	
3		X	X		X		
2	X	X		X			
1	X		X			X	
	1	2	3	4	5	6	

On the tie-up, please note that we had a plain weave tie-up on treadles numbered 3 and 4, but we just numbered the treadles from left to right, 1 to 6, so that the treadling given wouldn't be so confusing.

THREADING DRAFT:

3.	X	X	X	X	X	X	X	X	X	X	X	X										
2.													X	X	X	X	X	X	X	X	X	X	X	X
1.	X			X			X			X			X			X			X			X	
4.		X			X			X			X			X			X			X			X

There are 48 threads in each ¼ of a repeat. In order not to confuse, we will mention that one complete repeat is 192 threads, and we will give the color sequence below that was used in the warp.

WARP USED:

A. 20/2 Mercerized and Gassed Egyptian Cotton in 3 colors:
   1. Sage Green
   2. Natural
   3. Popcorn Yellow

B. 10/3 Mercerized Cotton in 6 different colors:
   1. Medium Green
   2. Forrest Green
   3. Yellow
   4. Dark Brown
   5. Beige, Rose
   6. Chocolate

WEFT USED:

Two different threads were used in the weft. One was a tightly twisted 10/3 cotton in bleached white, and the other was a bleached white cotton lace boucle.

COST OF THREADS USED:

1. 20/2 Egyptian Cotton, $5.00 lb.
2. 10/3 Mercerize Cotton, 79c per each 600 yard spool.
3. Cotton Lace Boucle, ½ pound spools, $3.35 per lb.

TREADLING:

For the bedspread:
No. 2—one time, 10/3 white
No. 6—one time, 10/3 white
No. 2—one time, 10/3 white
No. 4—one time, blea. Cotton Lace
No. 5—one time, blea. Cotton Lace
No. 4—one time, blea. Cotton Lace
Repeat over and over.

Sample page 4

ALTERNATE TREADLING:

The alternate treadling was used when we had this set-up on the loom only 14" wide for some mats, and they were very distinctive, with the use of the colors that we chose.

Treadle 6, 2, 6, 2, 6, 2, 4, 5 in sequence using all 10/3 dark brown cotton.

COLOR SEQUENCE IN THREADING:

1st 12 threads

1—20/2 sage green
3—10/3 medium green
2—20/2 sage green
3—10/3 medium green
1—20/2 sage green
3—10/3 medium green
2—20/2 sage green
3—10/3 medium green
1—20/2 sage green
3—10/3 medium green
2—20/2 sage green
3—10/3 medium green

2nd 12 threads

1—20/2 sage green
3—10/3 forrest green
2—20/2 sage green
3—10/3 forrest green
1—20/2 sage green
3—10/3 forrest green
2—20/2 sage green
3—10/3 forrest green
1—20/2 sage green
3—10/3 forrest green
2—20/2 sage green
3—10/3 forrest green

3rd 12 threads

1—20/2 sage green
4—10/3 medium green
2—20/2 sage green
4—10/3 medium green
1—20/2 sage green
4—10/3 medium green
2—20/2 sage green
4—10/3 medium green
1—20/2 sage green
4—10/3 medium green
2—20/2 sage green
4—10/3 medium green

4th 12 threads

1—20/2 sage green
4—10/3 forrest green
2—20/2 sage green
4—10/3 forrest green
1—20/2 sage green
4—10/3 forrest green
2—20/2 sage green
4—10/3 forrest green
1—20/2 sage green
4—10/3 forrest green
2—20/2 sage green
4—10/3 forrest green

5th 12 threads

1—20/2 natural
3—10/3 rose beige
2—20/2 natural
3—10/3 rose beige
1—20/2 natural
3—10/3 rose beige
2—20/2 natural
3—10/3 rose beige
1—20/2 natural
3—10/3 rose beige
2—20/2 natural
3—10/3 rose beige

6th 12 threads

1—20/2 natural
3—10/3 chocolate
2—20/2 natural
3—10/3 chocolate
1—20/2 natural
3—10/3 chocolate
2—20/2 natural
3—10/3 chocolate
1—20/2 natural
3—10/3 chocolate
2—20/2 natural
3—10/3 chocolate

7th 12 threads

1—20/2 natural
4—10/3 rose beige
2—20/2 natural
4—10/3 rose beige
1—20/2 natural
4—10/3 rose beige
2—20/2 natural
4—10/3 rose beige
1—20/2 natural
4—10/3 rose beige
2—20/2 natural
4—10/3 rose beige

8th 12 threads

1—20/2 natural
4—10/3 chocolate
2—20/2 natural
4—10/3 chocolate
1—20/2 natural
4—10/3 chocolate
2—20/2 natural
4—10/3 chocolate
1—20/2 natural
4—10/3 chocolate
2—20/2 natural
4—10/3 chocolate

9th 12 threads

1—20/2 popcorn
3—10/3 yellow
2—20/2 popcorn
3—10/3 yellow
1—20/2 popcorn
3—10/3 yellow
2—20/2 popcorn
3—10/3 yellow
1—20/2 popcorn
3—10/3 yellow
2—20/2 popcorn
3—10/3 yellow

10th 12 threads

1—20/2 popcorn
3—10/3 dark brown
2—20/2 popcorn
3—10/3 dark brown
1—20/2 popcorn
3—10/3 dark brown
2—20/2 popcorn
3—10/3 dark brown
1—20/2 popcorn
3—10/3 dark brown
2—20/2 popcorn
3—10/3 dark brown

11th 12 threads

1—20/2 popcorn
4—10/3 yellow
2—20/2 popcorn
4—10/3 yellow
1—20/2 popcorn
4—10/3 yellow
2—20/2 popcorn
4—10/3 yellow
1—20/2 popcorn
4—10/3 yellow
2—20/2 popcorn
4—10/3 yellow

12 12 threads

1—20/2 popcorn
4—10/3 dark brown
2—20/2 popcorn
4—10/3 dark brown
1—20/2 popcorn
4—10/3 dark brown
2—20/2 popcorn
4—10/3 dark brown
1—20/2 popcorn
4—10/3 dark brown
2—20/2 popcorn
4—10/3 dark brown

13th 12 threads
same as the 5th 12 threads

14th 12 threads
same as the 6th 12 threads

15th 12 threads
same as the 7th 12 threads

16th 12 threads
same as the 8th 12 threads

THEN, repeat the 16 groups of 12 threads each, so that you have 8 complete repeats. On completion of 8 repeats, I added the first 4 groups of 12 threads, thus making in all 1580 threads or 39½" width on the loom. Then in weaving the bedspread, you weave a little over 6 yards of the fabric, cut in half and then sew together with the two groups of 48 threads added making the center of the spread. You can also do it the other way, so that they make the outer edge if you so desire.

More About this Fabric

The sample this month is a fairly expensive one. I'm sorry to say so, but I didn't get a chance to keep track of how much warp was used, but because of the many different colors, it would make the cost of this material fairly high.

The weft I noticed was fairly inexpensive, as it did go quite a long way.

This fabric was inspired by a threading draft that I tried from the new edition of the "RECIPE BOOK", by Mary Meigs Atwater. The treadling that was used for this sample was an unconventional one that we made up ourselves, and the alternate treadling that we gave you was similar to the treadling suggested in the recipe book.

I might mention that we wove a series of mats with this same set-up, and the weft on these was just one color, a very dark brown, and the alternate treadling was used. I thought that this was very striking in the mats woven, and also saw that many other different weft threads could have been used to make an unusual mat.

The way that I gave the color sequence used in the threading is awkward, but if I should put it in the threading draft, it would be extremely hard for the printer to set up, and also I'm afarid would take several more hours of type-setting and thus cost more.

We also tried in the weft in place of the 10/3 cotton a 20/2 Ramie, thinking that it would make a firmer fabric. The Ramie would be satisfactory if we had had a heavier weight like a 16/3, but the 20/2 was not quite heavy enough.

We also tried a linen boucle with a rayon twist, and this was particularly effective when used with the 10/3 dark brown cotton.

We have another 3 yards of this to weave and then we should have enough to have a bedspread for ourselves as well as the samples for *Warp and Weft*.

THE STORY OF RAMIE—Continued

in a solution of soluble pine oil and Caustic soda for a three-hour period.

However, while this method does result in some tangling and matting, which has to be corrected in the picking-carding operation, requiring hand work.

In the picker, unless the fibre is parallel, it is so strong that it will pull the pins out of the picker; and, if the fibre is too long and a few strands become wound around the drum in the carder, it will actually lift the machine off the floor.

These are the reasons why, for the most part, our American mills are content to have the baled fibre shipped abroad and then imported back again as spun yarn. With mill wages constantly increasing here at home, it does not appear that this situation will change. It is interesting to note at this point that each year since 1950, some four million pounds of baled Ramie fibre have been exported from the port of Palm Beach, Florida, alone.

This raises the question, "Why bother with Ramie at all, if it is so much trouble? What does it have to offer?

Ramie is the strongest natural fibre known. And, it is stronger wet than dry. It absorbs moisture four times better than other fibres and it dries more quickly. After one washing, it does not lint off or shrink. It is extremely tough, and does withstand repeated beatings.

Ramie has also found a unique place for itself among hand weavers. Due to its tremendous strength and the unusual textures obtainable, it is becoming more popular all the time.

Now as to cost, Ramie when processed and then made available on the market, here in the United States, costs about 20% more to produce than does linen. And comparing it with cotton, we find that cotton yarn of the same count — with almost three times as much yardage, costs about 25% less than Ramie to produce here in the U. S.

So, the problem of importing the Ramie seems to be one of the ways of solving the cost problem.

Ramie and China Grass are among the oldest textile materials of the East. Both fibres, and the methods of processing them, are mentioned in ancient Chinese and Indian writings. Like flax, they were in current use in Egypt, and mummies shrouded in Ramie have been found in Egyptian tombs. In any case, it is certain that Ramie was as important in China as linen was in Europe, and its use spread to the Near East.

During the war, Ramie was used in parachute straps, packings for propellers, pumps, and thanks to its rot resistance, it was used by many armies in tropical countries. The English water system was destroyed by the many bombs during the war, and so their water pipes were woven of Ramie. Most of the fire hoses of today are of Ramie.

The Swiss are experts at most textile work, and they now combine Ramie with wool, and Ramie with cotton, and Ramie with silk.

Meanwhile — what is the future of Ramie? Where does it go from here. Let's watch it together and see. Edson K. Rice

CLASSIFIED ADVERTISING

A new classified advertising section will be tried out in Warp and Weft for a few months, to see if there is any interest or response. Why not advertise your old loom, duplicate equipment, and other such items in this section. Price per 5-line ad is $4.00. Payment to accompany your advertising copy.

SPECIAL OFFERING: Packaged threads for tapestry techniques or pattern weaving. 1 to 2 pounds—bobbined for use. $2.00 plus postage cash with order. Michigan orders add sales tax, prompt delivery. Hartland Area Crafts, P. O. Box 53, Hartland, Michigan.

FOR SALE: A 45" Fly Shuttle, 4 harness Burnham Loom, with plain beam. Almost new. Price, $125.00. Contact R. S. Spencer, 1616 Hollister, Santa Barbara, Calif.

HEDDLE TRANSFER RODS. A time-saver deluxe. A pair of thin, pliable steel rods to add heddles to your harnesses or take them away from your harnesses. $1.00 per pair. ROBIN & RUSS, 632 Santa Barbara St., Santa Barbara, Calif.

USED LOOMS FOR SALE: For further information about these, contact Robin & Russ.

1. **45" 4 Harness LeClerc, $65.00**
2. **36" 4 Harness Allen type Loom of hardwood, $85.00**
3. **40" 4 Harness Gilmore Loom, almost new, $150.00**

LINEN RUG WARP: size 9/3, with 900 yards per lb. $2.40 per lb. On ½ lb. spools. Robin & Russ, 632 Santa Barbara St., Santa Barbara, Calif.

SPEED-DEE, an excellent rubber cement, for cementing broken threads together. This works very well, and the joint is actually stronger than the thread itself. Takes about 1 minute to use. In small, convenient bottles. 50c per bottle, plus shipping.

CARDBOARD SPOOLS, for sectional warping or for saving surplus yarns from other finished projects. Strong pressed ends, size 2½x3¼x 5/16. $1.00 per doz. ROBIN & RUSS, 632 Santa Barbara St., Santa Barbara, Calif.

IMPORTED, 10/2 LINEN, ECRU IN COLOR. This nice quality Belgian Linen is on approximately one-pound spools, and is extremely reasonable at the price of $2.80 per lb. Ecru in color. 1,500 yards per lb. Robin & Russ, 632 Santa Barbara St., Santa Barbara, Calif.

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