A Word from the Editor:

A new year begins, and we hope that it will be a happy one for all of the subscribers to warp and weft, and that they will produce many interesting and inspiring and usable fabrics during the coming year.

This past month has been a busy one for Janice, Robin and Russ, with the Christmas season being the busiest one I think that we have ever experienced in our shop.

During the month, we made contacts that enabled us to purchase some of the prettiest wool tweed yarns that I have ever seen. We have just purchased some 14 different colors in wool tweeds, about 700 pounds of yarns, in interesting color combinations. These are small lots of from 30 to 80 lbs., of a color, but we just had to mention them, they are so pretty. These are made in Oregon, and we hope in the future to have more similar yarns when these are gone.

December also saw us obtaining from the printers the last of our new catalogues, so we will be able to send out another 1500 in January and February to those who have not yet received them.

It also saw us receiving from the printers all of the copies of the manual, WARP AND WEFT FROM TIBET, and we will review this in our next issue of Warp and Weft.

I’m afraid that not much weaving was done this past month, what with Christmas orders, Christmas cards, and planning our trip to Southern California over the Christmas Holi-

This Month’s Cover

The cover this month shows a portion of a wall hanging displayed at the Northern California Handweavers Conference in 1965.

This is a double woven fabric which could easily be done on a 4 harness loom.

Of particular interest was the way in which the top surface of the fabric was woven and not woven in different areas to create interest.

The background is of fairly smooth threads and the upper surface of this double woven hanging looks like a fine rayon boucle for both warp and weft. You can see also that in some areas the top surface of the wall hanging was woven tighter and looser to give shape to the various divisions of warp thread.

The use of the god’s eyes shows another way of decorating such a fabric. You can see from this photograph that these god’s eyes were put in the fabric after it was taken off the loom, and was just done by twisting some of the surface threads of the top fabric of the double weave.

You could also put in bells, buttons, seeds, pods, and other such materials in the same manner that these gods’ eyes were put in this hanging.
Conference Time In Southern California

March 18, 19 and 20th will see the weaving guild, "The Handweavers of the Valley," sponsoring the 1966 conference of Southern California Handweavers in Bakersfield, California, at the Civic Auditorium.

Cay Garrett of Berkeley, California, will be the speaker.

This conference will include booth displays from each guild, commercial booths, weaving and dyeing demonstrations, as well as a Luncheon and Style Show of handwoven garments.

For further information, you can contact the Publicity Chairman, Mrs. Lois Scott, Route 1, Box 310, Delano, California.

This Month's Book Review

This month, we want to bring to your attention a new manual entitled DYE PLANTS AND DYEING, put out by the Brooklyn Botanic Garden.

To my way of thinking, this is the most outstanding work on Vegetable and Plant Dyeing that I have ever seen.

It is an inspiring handbook with much content. First is a history of dyeing which is extremely interesting and well-written.

Next is a section on the basic steps of Mordanting and dyeing, with a description of some 11 different mordants that are commonly available. A list of the equipment needed is given, and then follow general and specific rules for dyeing and mordanting wool. Also, this is one of the few books which gives directions for the mordanting and dyeing of cotton, linen and silk.

Next follows a section which gives 35 recipes for the home dyer using plants available in the temperate zone and this means that most are available in the United States. A drawing of each of these plants is also included with each of these different recipes. It suggests and gives the directions for the use of such plants as Sumac, Bayberry, Braken, Osage-orange, Lily of the Valley, Nettle, Sedge, Dock, Marigold, Lichen, Butternut and Walnut hulls, Lombardy poplar leaves, Oak leaves, Coreopsis, Onion, Blackberry and others.

The next section of the book discusses the dyes used in olden times such as Indigo, Woad, Madder, and Log-wood, Fustic, and Weld. Formulas are also given for the use of all of these, and one or two others not mentioned.

The next interesting section of this book is the use of plants and vegetables in dyeing in many countries of the world. Descriptions and formulas are given for dyeing in plants and vegetables available in Japan, Thailand, Sikkim and Indonesia, Malaya, South Africa, Morocco, Greece, Yugoslavia, England, Ireland, Scotland, Norway, Lapland, Canada, and the United States. These instructions about dyeing in these various locations of the world are given by persons active in this handcraft in their own particular country.

A section is devoted to Family Dyeing in Colonial New England, telling of the development of this craft, and how better and better colors were gradually achieved.

A section then discusses Aztec Dye plants and how the Indians of prehistoric Mexico were so skilled in the use of natural colorings.

There is a section telling of Plymouth Colony's dye plants in early New England and how this craft is still being demonstrated there today.

Another section is devoted to the way a group of handweavers went about having a workshop in dyeing, how an individual dyer got started, and related information.

The final section of the book is devoted to the historic books on dyeing.

You can see from the length of this review at how pleasing and exciting a book we feel this is. Last, but not least, one of the most exciting things about it is the low cost of this work, as it sells for $1.65 plus 10c pp.

TITLE: DYE PLANTS AND DYEING
PUBLISHER: Brooklyn Botanic Garden
PRICE: $1.65 plus 10c pp.
AVAILABLE: Robin & Russ Handweavers

Page 3
A Winter Suit Project

This project is planned for a woman’s winter suit or perhaps a man’s sportcoat, and is made of a fine-quality wool homespun yarn.

WARP:
The warp is a fine quality homespun in 3 colors. The colors are:
- S—stone green homespun
- F—fawn colored homespun
- G—green heather homespun

WEFT:
The weft is the same homespun yarn as in the warp, with just one color being used. The weft color is called Aqua.

REED USED:
A 12 dent reed was used, and it was double sleyed, 2 ends per dent, or 24 threads per inch.

THREADING DRAFT:

<table>
<thead>
<tr>
<th>4</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>G</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>2</td>
<td>S</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>1</td>
<td>F</td>
<td>G</td>
<td>S</td>
</tr>
</tbody>
</table>

NOTE ABOUT THREADING DRAFT:
Please note that this is a standard twill threading draft, and that the three colors of homespun, Green Heather, Fawn, and Stone Green are used in sequence, one after the other.
First, we used stone green, then green heather, and then Fawn, in this sequence over and over.

TREADLING SEQUENCE:

Treadle No. 1—Aqua homespun
Treadle No. 2—Aqua homespun
Treadle No. 3—Aqua homespun
Treadle No. 4—Aqua homespun
Treadle No. 5—Aqua homespun
Treadle No. 2—Aqua homespun

END OF ONE REPEAT. TREADLE OVER AND OVER AS DESIRED.
I experimented with several other different treadlings, and liked several of them. I will give you some here.

A. Treadle 1,2,1,2,3,2,3,4,3,4,1,4 and start over again.
B. Treadle 2,4,2,3,1,3 and repeat.
C. Treadle 2,4,2,6,3,6,3,1,3,6,5,6 and repeat from the beginning.

TIE-UP DRAFT:

<table>
<thead>
<tr>
<th>4</th>
<th>X</th>
<th>X</th>
<th>O</th>
<th>O</th>
<th>X</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>X</td>
</tr>
<tr>
<td>1</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>X</td>
</tr>
</tbody>
</table>

X—tie-up for Counter-balanced looms.
O—tie-up for Jack-type looms.

SAMPLE:

MORE ABOUT THIS FABRIC:
First of all, I used a light to medium double beat on this material. I found a slight tendency for the homespun to cling together so I suggest that you beat with the shed open, hold the beater forward and change to the next treadle and then beat again. This helps clear the shed for the next shot of the shuttle.

One more thing that I must mention is the quality of this homespun yarn. Unravel a thread or two and you will see that it is a finer quality than most of our domestic wool yarn. This is made of an Australian wool and is an extra nice quality.

Also, there is a good tight twist to this thread, so that it does make a good warp thread.
does not have too much twist that it always doubles up as some does, but seems ideal for a warp thread, as well as a weft thread.

When using it for weft, I tried to keep it fairly taut, as almost any yarn of this type, when allowed to dangle loose, will tend to twist upon itself. However, I really had very little trouble with this, and I don't think it will be a problem with most weavers.

One more thing I must mention is that in weaving this sample, we did not use anything else for a selvage. We found this thread quite strong, and did not have a broken selvage thread until about the sixth yard of fabric. From then on, we had a thread break on the right selvage only every half yard or so. I would let it hang out until it was long enough to put back in without tying a knot, and found this was very satisfactory.

I never had any broken threads in the center of the material except when I had a knot in the thread pull loose. I think I had about 4 to 5 knots pull loose in the thirteen yard warp that I had on the loom. When this happened, I used the SPEE-DEE CEMENT, glued the two ends together, and in a minute was ready to weave again. The spee-dee cement was an invaluable aid in the weaving of this fabric, and helped speed up the weaving.

I will suggest that if you consistently have trouble with selvage threads, that you use eight threads of a 10/2 cotton on both selvage edges, thread them in a straight 1, 2, 3, 4 twill and in particular—wind these eight threads on a wooden spool, wrap around the warp beam and do it just one time, and then let this spool hang down from the warp beam. This way, the 8 cotton threads will be able to adjust to the elasticity of the wool warp threads. Also, the use of such a cotton selvage will help keep the homespun from weaving so narrow. We had this material set-up on the loom 40” wide, and when I was ready to take it off the loom, I found that it wove down to a 37” width. This is more shrinkage weft-ways, than normal, and this is because it is a wool homespun.

FINISHING OF THE FABRIC:

It is very important to use the proper finishing of this type of fabric. If you wish to have a lovely, soft fabric, follow these directions, and you will be very pleased with the results.

First of all, wash by hand, in 90 degree water with Ivory Snow. If your water is hard, add a small amount of Calgon with the Ivory Snow.

Second, immerse and let your fabric soak for about three to five minutes without agitation.

Third, hand wash gently for about five minutes. This will help avoid harshness in this fabric if you handwash it gently.

Fourth, you should rinse in about 90 degree water until the rinse water stays clear. Gently squeeze water out of it and allow to dry or hang from a line by the selvage edge, and allow to drip dry.

We might also mention that this yarn does contain the spinning oil that you usually associate with homespun yarn. Thus, the proper washing will help remove this oil, will allow the twist to relax and loosen slightly, and thus make a soft and pleasant feeling fabric. Also, the proper washing will lighten the colors slightly from what they appear like when in oil, and will give more life to the colors.

REMEMBER that excessive heat or mechanical action from washing in a washing machine will make the fabric harsh, or may even cause matting.

After the fabric has drip dried, then we took a steam iron and pressed with the steam being used. We pressed it on both sides, and here is the finished result in this month’s sample.

COST OF THE FABRIC:

First of all, this homespun comes in some 16 lovely colors, and we will be pleased TO SEND YOU A FREE SAMPLE SHEET UPON YOUR REQUEST.

This homespun comes on ½ lb. spools, and is priced at $7.60 per lb. It has 3600 yards per lb.

We had a 13 yard warp, 40” wide on the loom, and this took 3½ lbs. of warp. Thus, our 13 yard warp cost $26.60 or the cost per yard comes to $2.05 per yard.

We received a total of 11 and 2/3’s yards of finished fabric when we took the material off the loom. It took 2 lbs. 9 oz. of the home-
spun for the weft in this material. Thus the total weft cost was $19.48 in all.

After we washed this material, and steam pressed it, it was 34 inches wide, and we had a length of 11 yards left.

Thus the total cost for 11 yards of finished fabric was $46.08, or the cost per yard of finished fabric is $4.19 per yard.

**FABRIC COST PER YARD, INCLUDING BOTH WARP AND WEFT THREADS, 34” wide, 36” long, is $4.19 per yard.**

Another interesting wall hanging was this one displayed at the Northern California Handweavers Conference this year. You can see that pieces of driftwood were incorporated in this wall hanging. Also, the basic warp was 3 bands of material, and the interesting portion is the manner in which these three bands were divided and woven to provide hanging space for the different shaped and types of bells. I do not know the weaver of this one, but thought it very cleverly done, and I enjoyed it tremendously.

**SETT CHART**

Use medium sett for firm tabby when crossed with yarn of same grist.

* Use closer sett for very firm tabby or twill.

Use wider sett for loose, soft tabby.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>Approx. Yards per lb.</th>
<th>Wide</th>
<th>Med.</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COTTON</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20/2</td>
<td>8400</td>
<td>26</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>24/3</td>
<td>6700</td>
<td>22</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>20/3</td>
<td>5600</td>
<td>20</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>10/2</td>
<td>4200</td>
<td>20</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>10/3 (Frostone)</td>
<td>2800</td>
<td>14</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Perle No. 3</td>
<td>2100</td>
<td>12</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Carpet Warp (4 ply)</td>
<td>1600</td>
<td>12</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>Perle No. 3</td>
<td>1260</td>
<td>10</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>3-ply Extra</td>
<td>850</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td><strong>LINEN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40/2</td>
<td>6000</td>
<td>24</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>20/2</td>
<td>3000</td>
<td>20</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>14/2</td>
<td>2100</td>
<td>16</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>10/2</td>
<td>1500</td>
<td>12</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>10/5</td>
<td>600</td>
<td>8</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td><strong>WOOL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabri (18/2)</td>
<td>4800</td>
<td>18</td>
<td>24</td>
<td>30</td>
</tr>
<tr>
<td>3-ply Fingering Yarn</td>
<td>2400</td>
<td>12</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Germantown</td>
<td>1500</td>
<td>10</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Knitting Worsted 4-ply</td>
<td>1100</td>
<td>8</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>
CLASSIFIED ADVERTISING

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.

IN STOCK:

NATURAL RAYON & COTTON BOUCLE.
This is an extra nice quality yarn with 1600 yards per lb. It is about 50 per cent rayon and 50 per cent cotton. Price is reasonable at $2.40 per lb., and available on 1/2 lb. spools. Free sample upon request. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

FOURTEEN WOOL TWEED YARNS.
We have just purchased 700 lbs. of 14 different colors in wool tweed yarns. We have different sizes and different color combinations available. The price is $3.20 per lb. We will send free samples upon your request. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

WARP AND WEFT FROM TIBET.
Just reprinted, this manual gives directions for rug weaving as done by the Tibetans. It also gives directions and dimensions for making a small loom that can be used for toapestries or wall hangings or rugs. In about 1 lb. 2 oz. each. Price is $3.50 plus 10c postage. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

EXTRA LARGE SWEDISH UMBRELLA SWIFTS.
We have the extra large size and the regular size both in stock. Price is $5.50 each plus postage. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

WOOL CARDS FOR CARDING WOOL IN 3 KINDS.
We stock 3 kinds of wool cards. The ones we sell the most are imported from Canada and sell at $5.00 per pair. The next most popular are the ones we import from Sweden, which are a little finer and a little better made. Price is $6.00 per pair. The most expensive ones are those from the U.S., made in a metal frame, and which are a little smaller than the other two kinds. These are $10.00 per pair. Postage extra on all 3 kinds. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

BROMA—
The clear plastic spray for preventing your reeds, heddles and other metals from rusting. Available in a large, spray dispenser can at $1.95 per can. Postage is extra. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

SPEE-DEE CEMENT.
This is the cement I mentioned that is used in gluing broken warp ends together. Many other household uses also. Is stronger when dry than actual thread itself. Is waterproof, and comes in a plastic, squeeze-tip bottle. Dries in one minute. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

HANDWEAVING by Iona Plath.
This book continues to be one of the best sellers in weaving books. Price is $8.95 plus 20c postage. Has complete instructions for many, many, 4 harness projects. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

FLAKE LINEN & RAYON TWIST:
This is spun to order for us, and is 52 per cent linen and 48 per cent rayon twisted together in a flake twist. This is the dark, natural gray linen with a white rayon. Excellent in drapes and upholstery. 2400 yards per lb. $4.00 per lb.

KELLY GREEN, FINE LOOP MOHAIR.
This is an excellent quality mohair yarn, with about 2200 yards per lb. On cones of about 1 lb. 2 oz. each. Price is $3.50 per lb. Can be used for knitting or weaving. ROBIN & RUS, 533 North Adams St., McMinnville, Oregon.

SUPPORTED GOLD AND SILVER LUREX.
on 1/2 lbs. metal spools. Regular price is $3.50 per spool, and we will have these on special while they last at $2.00 per spool plus postage. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

ADVENTURES IN STITCHES by Mariska Karasz.
is a revised and enlarged edition of an outstanding stitchery book. Price is $15.50 plus 20c postage. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

IMPROVED ADAPTORS FOR SWEDISH HAND WINDERS:
We have these adaptors for the small shaft, Swedish hand winders made to order for us. Longer than usual, with a better taper and fit so they will hold the 4" Leclerc plastic bobbins. Price is $1.00 plus 10c postage. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

HAND TAPESTRY BEATERS:
These hand beaters are 6 pronged with tempered aluminum prongs. Will not discolor yarn in any way. Well made with hardwood handle, and curved prongs. Price is $6.50 plus postage. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

SPIRAL TWIST GOLD & RAYON BOUCLE.
This is a natural boucle with pale gold twist. A very popular yarn. Available on 1/2 lb. spools at $1.60 per spool. It has about 700 yards per 1/2 lb. spool. Robin & Russ, 533 North Adams St., McMinnville, Oregon.

7/1 and 4/1 BLEACHED THIRSTY LINEN.
This is imported from Scotland, and comes on 1 1/2 lb. spools or cones. The 7/1 has 2100 yards per lb., and the 4/1 has 1200 yards per lb. A good buy at $2.40 per lb. Excellent for use in towels of all kinds. Quite absorbent, and very soft when washed several times. Robin & Russ, 533 North Adams St., McMinnville, Oregon.
The Weaver's Marketplace

HANDWEAVING
YARNS and SUPPLIES
A wide variety of distinctive yarns, developed especially for handweaving is available for prompt shipment in quantities to suit your needs.

The Handweaver's Headquarters
Lily Mills Company
Dept. HWWW Shelby, N. C.

<table>
<thead>
<tr>
<th>Width</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>16&quot; — 22&quot; — 30&quot; — 40&quot; — 50&quot;</td>
</tr>
<tr>
<td>Folding</td>
<td>Made of Cherry</td>
</tr>
</tbody>
</table>

NORWOOD LOOMS
The Norwood Loom Co.
P. O. Box 272
Baldwin, Michigan

SECTIONAL WARPING MADE EASY
A new, thoroughly illustrated manual on setting up the loom very quickly with the sectional warp beam method.

Complete in every detail
$2.50 plus 10c postage

Robin and Russ Handweavers
533 North Adams St., McMinnville, Oregon

NEW!!!
Functional Overshot by Grace D. Blum
A basic source for modern designs. Contains concise directions for weaving almost any overshot threading, in 24 different methods and 32 woven swatches. $16.50 per copy.

Mailed prepaid when check accompanies order.

Hand Weavers' Work Basket
Box 691, R.R. 1 West Chicago, Illinois