A Word from the Editor:

Our adult education class this time is a very small class, but a very enthusiastic one. Just six students is an ideal class and some interesting projects are being done. One student wove a wool and linen rug, as per a pattern that we gave in warp and weft about 8 or 10 months ago. Anotherwarped the loom with heavy jute and used the same weft in weaving bag material. A third student wove some canvas weave place mats and is now setting up the loom to weave an afghan of knitting worsted. Another student is weaving the silk dress material that was made, using the same set-up as was used for the linen drapery sample this month, and another student is weaving some all wool yardage, like a former warp and weft sample, called Green Gazelle. You can see from this, that this is an interesting and eager group, and it is fun to have such a group.

By the time you get this, it will be probably just a few days before Christmas, and so we three would like to extend the SEASONS GREETINGS to all of our weaving friends and subscribers of Warp and Weft. We had hoped to have a cover of two woven Christmas door swags for this month, but I’m sorry to say so, but the pictures did not turn out. However, we will give this to you in a later issue, as we have just taken some new pictures and hope that they come out satisfactory. Also, in the same issue of warp and weft, we will give the set-up and weaving plan for these Christmas Swags.

It is our plan this Christmas, as we try to do every Christmas and close between Christ-
Why not try something like this yourself, using different techniques, and different materials than your normal weaving. Experiment, until you come up with something that you like.

This Month's Second Project:

This month, I would like to tell you about an upholstery project we have on the loom. One of our customers brought in a handwoven sample from Sweden, and asked us if we could make something like it for her to use as upholstery on two davenports.

Our warp in our sample and in the finished material we are weaving is a 20/2 mercerized black, egyptian cotton with 8400 yards per lb. This is set-up in a straight twill on the loom at 20 threads per inch. It is set at only 20 threads per inch, so that the weft will beat in tightly and pack firmly and make a good upholstery fabric.

This is a ribbed fabric with 3 ribs in the weft in every repeat of the pattern. Our weft thread is a 3 ply sport yarn in a light heather grey color and in a natural. The third thread is a bright yellow 4 ply knitting worsted for a 2 thread rib of the knitting worsted.

Once again, the threading draft was a straight 1, 2, 3, 4 straight twill threading. Our tie-up is just one treadle tied to one harness for the first 4 treadles, and the plain weave or tabby treadles are also used.

TIE-UP DRAFT:

```
4  X  X
3  X  X
2  X  X
1  X  X
```

In this fabric, we find that we are averaging about 24 threads per inch in the weft. This is mainly because of the ribs, which pack together much tighter than the plain weave areas of the fabric. Here is the treadling:

TREADLING SEQUENCE:
1. Treadle A & then B—Heather Grey
2. Treadle A & then B—Natural
3. Treadle A & then B—Heather Grey
4. Treadle A & then B—Natural
5. Treadle A & then B—Heather Grey
6. Treadle A & then B—Natural
7. Treadle A & then B—Heather Grey
8. Treadle 1, 2, 1, 2, 1, 2, 1, 2 with the natural 3 ply sport yarn.
9. Treadle A & then B—Heather Grey
10. Treadle A & then B—Natural
11. Treadle A & then B—Heather Grey
12. Treadle A & then B—Natural
13. Treadle A & then B—Heather Grey
14. Treadle A & then B—Natural
15. Treadle A & then B—Heather Grey
End of the second plain weave area.
16. Treadle 1, 2, 1, 2, 1, 2, 1, 2, with the natural 3 ply sport yarn.
17. Treadle A & then B—Heather Grey
18. Treadle A & then B—Natural
19. Treadle A & then B—Heather Grey
20. Treadle A & then B—Natural
21. Treadle A & then B—Heather Grey
22. Treadle A & then B—Natural
23. Treadle A & then B—Heather Grey
End of the third plain weave area.
24. Treadle 1, and then 2, with the 4 ply, bright yellow knitting worsted.

END OF ONE REPEAT. REPEAT OVER AND OVER AS DESIRED.

This treadling sequence above, gives us 2½" of Finished Fabric, and it is a total of 24 threads of weft per inch.

One thing that is very important in this fabric is the fact that you should have a firm, tight, even, double beat. Beat with the shed open, change to the next treadle, and then beat again.

Our warp is set up 48" wide on the loom, and the finished fabric ends up to be 46" wide. In one yard, we used about 5 to 6 oz. of the Cream, 3 ply; 3 to 4 oz. of the Light Oxford Heather 3 ply; and about ½ to 1 oz. of the bright yellow knitting worsted.

This fabric is very firm, as is so characteristic of so much of the Swedish handwoven upholstery.

I will estimate the cost of this fabric per yard for a 46" width finished fabric.

Continued on Page 5
SEMI-SHEER SINGLES LINEN DRAPES

This is a fabric planned for a drapery, to allow light in, and yet to keep one from seeing in.

WARP:
There were 4 different threads used in the warp as listed herewith.
L—10/1 Natural Linen
W—White, heavy cotton boucle
F—Fine, natural cotton boucle, with 3500 yards per lb.
G—Gold rayon boucle with gold twist, with 1600 yards per lb.

WEFT:
Only one thread was used in the weft. It was a 9/1 linen and rayon combination thread which is 50 per cent linen and 50 per cent rayon. This thread has about 2600 yards per lb., and comes on ½ lb. spools, and about 2 lb. cones.

REED USED:
A 9 dent reed was used. This is the first time we have used a 9 dent reed in several years. There was a special sleying of this reed, as is listed later.

THREADING DRAFT:

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KEY TO THREADS IN THREADING DRAFT:
1. W—heavy white cotton boucle
2. L—9/1 Natural linen
4. F—Fine, natural cotton boucle

TIE-UP DRAFT:

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1 2 3 4 5 6
A B

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

TREADING SEQUENCE:
Our treadling for this sample is just a plain tabby weave or alternate the A & B tabby treadles for a plain weave. HOWEVER, it is very important that you use a firm double beat, and that you open the shed, beat, throw your shuttle and change to the next shed and beat again to help clear the shed. There is a slight tendency for the 10/1 natural linen to cling, and thus if you use this beat sequence of beating with the shed open, this helps to clear the shed.

SLEYING OF THE REED:
2 Fine Nat Cotton in 1 dent
2 Gold boucle in 1 dent
2 Fine Nat Cotton in 1 dent
1 10/1 Nat Linen in 1 dent
2 10/1 Nat Linen in 1 dent
2 10/1 Nat Linen in 1 dent
2 10/1 Nat Linen in 1 dent
2 Heavy White Cotton in 1 dent
2 10/1 Nat Linen in 1 dent
2 10/1 Nat Linen in 1 dent
2 10/1 Nat Linen in 1 dent 
1 10/1 Nat Linen in 1 dent 
End of one pattern repeat takes up 12 dents.

Thus, this comes to actually 16½ threads per inch with the use of a 9 dent reed.

MORE ABOUT THE FABRIC:

We had a 10 yard warp, 41" wide, and from this amount of warp, we had 8-2/3's yards of finished fabric.

Also, let me once again repeat two things that I feel are very important in the weaving of this fabric.

1. It is important that you weave this fabric with a fairly firm, tight tension. As there is very little stretch in a warp of this type, you must keep the warp fairly tight so that every thread is caught in the weaving.

2. The second most important thing is the beat. You must have a firm, double beat. Beat with the shed open, throw the shuttle, change to the next shed, and beat again, so that your weft packs in fairly tightly.

Another thing that I want to mention is that we liked this stripe arrangement very much, so we put a new warp on the loom, and we changed and used a 3 ply tussah silk in place of the 10/1 linen, and we used the 6/1 tussah silk as the weft in this fabric. This made a very attractive material for dress yardage, and is extremely pleasing. We are also using the same 3 ply tussah silk in the warp along with the same stripe threads, and in the weft are using a pale yellow tussah silk for another piece of dress yardage, and this also is very, very attractive material for dress yardage. This is one of the projects that is being woven in our adult education class, and it is one the students like very much.

COST OF THE THREADS IN THIS FABRIC:

There are 5 different threads used in the fabric, four in the warp and one in the weft. Here are the cost per lb., and yardages per lb. for all of these threads.

1. The heavy white cotton boucle in the warp has 1050 yards per lb., and it comes on 1 lb. cones at $2.95 per lb. It is also available on 2 oz. spools and this costs 43 cents per 2 oz. spool. This thread is excellent weft for heavy white, absorbent, cotton, towels.

2. The 10/1 natural linen comes on 1 lb. cones, is a wet-spun linen, so it is a good warp thread. It is priced at $3.70 per lb. on 1 lb. cones.

3. The fine, natural cotton boucle has 3500 yards per lb., comes on ½ lb. spools, and is $3.50 per lb., or $1.75 per ½ lb. spool.

4. The gold rayon boucle with gold twist has 1600 yards per lb., and it comes on ½ lb. spools of 800 yards each, at $1.75 per ½ lb. spool.

5. The 9/1 linen and rayon combination is a 50 per cent linen, 50 per cent rayon thread. It has about 2600 yards per lb., and is available on ½ lb. spools or on approximately 2 lb. cones. The price is $3.20 per lb., or $1.60 per ½ lb. spool.

COST OF THE FABRIC:

In a 10 yard warp, 41" wide, it took the following amounts of thread and the cost of each thread is listed.

1. 1 lb. 8 oz. 10/1 Nat. Linen — $5.55
2. 11 oz. Heavy White boucle — 2.04
3. 5½ oz. fine nat. cotton boucle — 1.21
4. 7 oz. Gold Boucle with gold — 1.53

Total warp cost, 41" wide — $10.33
Thus your warp cost per yard is $1.04

In the weft, it took 1 lb. 14 ounces of the 9/1 linen and rayon for the weft in 8-2/3 yards of fabric. Thus, the weft cost was $6.20 in all or 72 cents per yard.

WARP COST PER YARD — $1.04
WEFT COST PER YARD — .72

FABRIC COST PER YARD — $1.76

This Month's Second Project:

Continued from page 3

In the warp, because of the rib, we allowed a 45 yard warp, 20 threads per inch, 48" wide on the loom. This takes just slightly
over 5 lbs. (5 lbs. 3 oz.) of the 20/2 Egyptian cotton warp in black, at a price of $5.50 per lb. Thus, the total warp cost is $30.25, or the cost per yard is 68 cents per yard.

In the weft, we found that it took about 10 oz. of the 3 ply sport yarn in the 2 colors for each yard of finished fabric. It also took slightly less than 1 oz. of the knitting worsted. Thus, the weft for 46″ wide finished material, costs about $4.30 per yard.

WARP COST PER YARD —  .68
WEFT COST PER YARD —  4.30

FABRIC COST PER YARD, 46″ —  $4.98

The 3 ply sport yarn sells for about 40 cents per ounce or $6.40 per lb.

This is the story of the fabric so far. I must tell you that I have only 2 yards of the fabric finished, and another 34 yards of upholstery to go. Hope that I have it done by this time next month.

**This Month’s Book Review:**

A just recently published book is the one by Anni Albers, entitled "ON WEAVING."

A different approach to weaving is the provoking and challenging book "On Weaving." This is not a book of patterns, or definite directions and formulas, but is a study of textile fundamentals and their related principles.

Miss Albers traces weaving back to the development of "thread," and then works from thread through the different stages of advancement in the weaving or textile world.

This book is study of textile theories and Mrs. Albers feels that the ancient Peruvians had the most to offer us in the world of instruction.

There are some 112 illustrations in the book given to show some of the ancient equipment, stages of evolution of this equipment, and interesting woven pieces with unusual techniques.

The serious student of weaving theories will appreciate this book immensely, as it is just as we mentioned before, a thought provoking book, trying to provoke you into studying the different weaves, the possibilities available from these different weaves, and the eventual stimulation of you as an individual into trying some of the different techniques and hoping that you will benefit by the thoughts of the author on the many different facets of weaving.

She advocates that there are only three major kinds of weaves, the plain weave, the twill weave, and the satin weaves, and that all of the other weaves that we think of are variations of one of these three basic weaves.

Some of the illustrations are outstanding, but there is very little here to the average weaver who is normally looking for help in patterns and pattern arrangement, the proper use of color and texture, and the proper use of the traditional and contemporary, and the right feel or touch of the finished fabric.

Her book is written not primarily for the edification of weavers, but for the textile field in general and all of those involved in the work of weaving and woven fabrics, that they might better understand the whys and the wherefores of a woven fabric.

**TITLE:** ON WEAVING

**AUTHOR:** Anni Albers

**PUBLISHER:** Wesleyan University Press

**Middletown, Connecticut**

**PRICE:** $15.00 plus 25 cents parcel post

**AVAILABLE:** Directly from the publishers or from Robin & Russ if desired.

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**WARP AND WEFT FROM TIBET**

An excellent manual on the tapestry type rugs woven in Tibet. Thoroughly illustrated, with complete instructions for the making of the tapestry type loom, which could be used for other items besides rugs. Written by Mr. William A. King, who's parents were missionaries in Tibet for over 35 years. Price is $3.50 plus 15 cents pp. Published by Robin & Russ Handweavers.

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IN STOCK:

HEATHER GREY BRUSHED MOHAIR
With a light green fleck, 900 yards per lb. 1 lb. cones. Excellent for both weaving and knitting. Price is $4.80 per lb., and this is another yarn which is 70 percent mohair and 30 percent nylon. Free sample upon request. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

HANDWEAVING PATTERNS FROM FINLAND:
This is an excellent book for the multiple harness weaver with good photographs and very nice projects. Price is $5.00 plus 20c postage. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

DYE PLANTS AND DYEING-A HANDBOOK:
An excellent new manual on natural or vegetable dyeing. The price is $1.65 plus 10c postage. Many recipes and interesting articles. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

4 PLY, NATURAL DOUPPIONI SILK.
A fairly heavy silk warp with 2500 yards per lb. Available on cones of about 1 lb. 4 oz. each at $4.00 per lb. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

LAPEL PINS—A MINIATURE SHUTTLE.
A very nice reproduction in miniature of a boat shuttle with bobbin and thread for a lapel pin. Price is $2.00 each. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

BLACK WALNUT WOOD SLATS:
About 165 to 175 per bundle, these are nice quality wood slats for lampshades, mats, covers for waste baskets, magazine racks, etc. Price is $1.50 per bundle, plus postage of about 20c per bundle. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

BOBBIN LACE PILLOWS:
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BOBBIN LACE BOBBINS:
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BOBBIN LACE BOBBIN WINDERS:
These have a special clamp-type adaptor made in place of the shaft of the Swedish Hand-Winder. Different size bobbin lace bobbins will clamp into this clamp. Price is $12.50 plus postage. ROBIN & RUSS, 533 North Adams St., McMinnville, Oregon.

SPEE-DEE CEMENT:
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