A TABLE SQUARE, IN COTTON AND LINEN
(from a Swedish piece)

This bulletin marks the beginning of our third year of LOOM MUSIC, and we now number our friends, from every part of the continent, in many hundreds. Writing here, one of us on the eastern fringe and the other on the western fringe of the Canadian prairie, we send to you our 1946 greetings on a beautiful sparkling winter day. There is just enough frost in the air to make it exhilarating.

Looking back over 1945 we can note a decided quickening of interest in handicrafts, particularly in weaving. Even so early as this, plans are being made for summer conferences. In answer to many inquiries, we can now say that information on the Banff School of Fine Arts, July 17th to August 24th, 1946, is now in preparation. Booklets may be obtained by writing to the director, Mr. Donald Cameron, University of Alberta, Edmonton, Alberta.

For this month's weaving, one of our Swedish friends, Mrs. Sadie Hammarstrand of Winnipeg, has loaned us a lovely little cloth from her linen chest. It was woven about forty years ago in Sweden. It carries out an arrangement of materials found in many Swedish pieces, -- a cotton warp and a linen weft. In our present shortage of fine warp linen, this piece makes a very happy choice for a beautifully fine cloth. The draft is an overshot, but so closely is the warp set that the overshots are
nowhere longer than a quarter of an inch. The tabby is fine, so
that the linen pattern threads lie close together, and do not
present the "stringy" appearance which is sometimes seen when
linen is used as pattern weft in an overshot draft. Part of the
pattern, at a glance, rather resembles Queen's Delight, p. 174, of
The Shuttlecraft Book, but the whole weaving is drafted very
differently.

Threading Draft for Square

<table>
<thead>
<tr>
<th>PATTERN</th>
<th>Begin</th>
<th>BORDER</th>
<th>Begin</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

120

150

180

210

240

270

300

330

360

390

420

450

480

510

540

570

600

630

660

690

720

750

780

810

840

870

900

930

960

990

1020

1050

1080

1110

1140

1170

1200

1230

1260

1290

1320

1350

1380

1410

1440

1470

1500

1530

1560

1590

1620

1650

1680

1710

1740

1770

1800

1830

1860

1890

1920

1950

1980

2010

2040

2070

2100

2130

2160

2190

2220

2250

2280

2310

2340

2370

2400

2430

2460

2490

2520

2550

2580

2610

2640

2670

2700

2730

2760

2790

2820

2850

2880

2910

2940

2970

3000

3030

3060

3090

3120

3150

3180

3210

3240

3270

3300
**THREADING PLAN**, for a 34 1/2" square:

<table>
<thead>
<tr>
<th></th>
<th>1234 1234</th>
<th>8 ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selvage</td>
<td>1234</td>
<td></td>
</tr>
<tr>
<td>Border</td>
<td>12 repeats</td>
<td>20 x 12</td>
</tr>
<tr>
<td>Pattern</td>
<td>3 repeats: 430 x 3</td>
<td>1290 ends</td>
</tr>
<tr>
<td>To balance, add first 289 ends of pattern draft x 1</td>
<td>289 ends</td>
<td></td>
</tr>
<tr>
<td>Border, reversed, 12 repeats</td>
<td>240 ends</td>
<td></td>
</tr>
<tr>
<td>Selvage, reversed, 4321 4321</td>
<td>8 ends</td>
<td></td>
</tr>
</tbody>
</table>

**WARP AND WARP SETTING**

This particular little cloth uses a fine cotton for warp.

A couple of months ago a visitor from Hartland, Wisconsin, commented on the fact that many of us generally used warp settings no greater than 30 ends per inch, as for coverlets, but that weavers near Hartland were using much closer warp settings. She mentioned one person who was weaving luncheon sets in 4-harness overshot with a warp set at 96 ends per inch! We took a long breath, envisioned the task of drawing that in by one's self, and sighed. Besides, what a lot of heddles would be needed! In view of such industry, our little Swedish cloth set at 60 ends per inch should not even cause a breath of discouragement?

**Sixty ends per inch** it is, however, and a single sight of the finished article stirs one to admiration and ambition.

As to warp material, we are fortunate to have available a 50/3 Egyptian cotton in white, 15,000 yards per cone, at about $2.25 per cone. This is obtainable from the Hobbycraft Studios, 29 Gorge Road, Victoria, B.C. Miss Hill, whose studio it is, has also a little natural at $1.45 per cone (10,000 yds.), and more on order. For those who have not Miss Hill's latest stock card, she tells us that she has the last available (for a long time) of Cronita in white, beige, ecru, navy, and autumn glow (a rich henna). Cronita is a little lighter in weight than Lily's Frost Tone.

She also has the last of the mercerized crochet cotton, #20 and #30, white, at $3.50 per pound. Miss Hill asks that postage be
included with an inquiry.

Let us then consider our 50/3 warp requirement. As the threading plan calls for 2075 warp ends, this means a warp 2 yards long for one cloth, or 4150 yards. But we are sure all that threading warrants more than one cloth, so let's warp at least 7 1/2 yards and have six squares. This runs us slightly over one of the 15,000 cones of white 50/3 for our warp, with a second cone to be ordered for tabby, and more if serviettes are planned.

**WEFT**

The pattern weft in our cloth is similar to about a #20 lea linen weft which we have obtained from the Searle Grain Co.

The tabby is the same white 50/3 as the warp.

One more address, if you do not already have it on file: Reeds and hadles (reconditioned and guaranteed) from Howard Bradshaw, P.O. Box 1103, Spartanburg, South Carolina.

Our last quotation showed 9, 10 and 11" hadles at $2.50 per thousand; 12" at $3.00. Reed prices range from 40" long at $1.25 to 65" long at $2.50, dents from 5 per inch to 35 per inch in great variety. These prices are so reasonable that it behooves us to check up on our equipment, and this month add to our needs. Every weaver needs a variety of reeds. Mrs. Atwater quotes the order of usefulness as: 15, 12, 10, 16, then what you please! A 30-dent reed would be excellent for our purpose when making this square, but 4 ends to a dent in a 15-dent reed is entirely possible.

**TIE-UP**

The tie-up is the standard 4-harness overshot one:

```
  X X X  X  4
  X X   X  3
X X X   X  2
  X X X  1
1 2 3 4  A B
```

Sinking shed or counterbalanced loom

Rising shed, or table, or Structo loom

**THE TREADLING**

The treadling is strictly "as drawn in", and each unit when woven should constitute a square (see drawing, p. 8)
Border: Treadle in order, 1, 2, 3, then 4, and repeat, using enough shots for each treadling so that the corner is square when woven, - our cloth has 3 shots of each treadling, in the above order. The diagonal of overshot squares should run from the right hand corner upward and to the left at a true 45°. Tabby A follows the first pattern shot, Tabby B the second pattern shot, continuing throughout the piece.

Pattern: Treadle 1 about 40 times, or until the block is square. For those who like to check the "as drawn in" treadlings against the draft, it will be noted that the small tie-down threads on harness 3 are not woven -- they merely break the area of the large block so that overshots are small. Then

```
Treadle 4 4 times
   3 4   3 2 3 2 3 2 3 4
   4   "   "   "   "
   } 1st star

Treadle 1 4 times
   2 4 2 2 2 2 2 4
   } 2nd star

Treadle 4 4 times
   3 4 2 2 2 2 3 4
   } 3rd star

Treadle 1 40 times, or until square

Treadle 4 3 times
   3 3 3 3
   2 3 3
   3 3
   } Repeat treadlings in this same order until a diamond square results. There should be 25 groups on the square's diagonal.
```
Treadle 4 3 times
Repeat the above pattern treadlings 3 times.
Treadle 1 40 times, or until square.
Repeat 1st, 2nd, and 3rd stars
Treadle 1 40 times, or until square
Repeat border treadlings, reversed.

NOTE: It should be emphasized that the above numbers of treadlings were the ones needed to produce a true diagonal with the materials used. With a coarser or a finer pattern weft, the treadlings would have to be decreased or increased accordingly.

The resulting cotton and linen cloth should be a firm, stiff, heavy, damask-like (in feel only) material. It is finished with a simple 1/4" hand-sewn hem at either end.

Serviettes

There were no serviettes with this Swedish cloth, but we think you will want to make some. A warp of white 50/3's, 12½" wide, would be suitable:

**THREADING PLAN,** for serviettes

| Selvage | 1234 | 4 ends |
| Border  | 1 repeat | 20 ends |
| Pattern | 1 repeat | 430 ends |
| To balance, add first 289 ends of pattern draft | 289 ends |
| Border, reversed, 1 repeat | 20 ends |
| Selvage, reversed, 4321 | 4 ends |
| | | 767 ends |

**SERVIETTE TREADLINGS**

Weave 2" tabby (treadles 5 and 6 alternately, using linen.
Pattern band: Treadle 4 4 times
\[
\begin{align*}
3 & \quad 4 \\
2 & \quad 2 \\
3 & \quad 2 \\
2 & \quad 2 \\
3 & \quad 2 \\
2 & \quad 2 \\
3 & \quad 4 \\
4 & \quad 4 \\
\end{align*}
\]
Star #1

Weave 7" tabby
Repeat star band
Weave 2" tabby

OR, instead of weaving the star as the pattern band:
Treadle 1 40 times
OR, use the criss-cross treadling for the pattern bands:

Treadle 4 3 times
3 3 "
2 3 "
3 3 "
4 3 "
3 3 "
2 3 "
3 3 "
4 3 "

Any one of these will make an attractive end border for serviettes, -- they would also be suitable for place pieces. Might as well warp a long warp, don't you think?

-------------

We are pleased to receive your renewals for 1946. Many have already come in, and we hope others will arrive well in advance of our next mailing date, February 1st, so that our plans can be made accordingly. Orders should be mailed to Mrs. Sandin.

-------------

NOTICE TO CANADIAN CRAFTSMEN

"An exhibition of weaving and spinning will be held at the Art Gallery, Vancouver, under the sponsorship of the Canadian Handicrafts Guild, from February 12th to March 3rd, 1946."

The above is the opening paragraph from a preliminary notice which came to us recently, and we are glad to be able to pass on this information through the medium of LOOM MUSIC. All entries must be in Vancouver between January 30th and February 6th, 1946, and anyone who is interested should write for entry forms and other necessary instructions to: The Folk Craft Shop, B.C. Weavers' Guild, 422 Richards Street, Vancouver, B.C. (No entrance fee is charged.)

-------------

Good Weaving!

Ethel Henderson
Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba

Mary Sandin
Mrs. R. B. Sandin
University of Alberta
Edmonton, Alberta

Per year $3.00
sample copy .35
Copyright 1946
Sketch of Corner of Swedish Square
(Scale: 1 pattern repeat = 7 inches)
HANDWOVEN SUITINGS
SEASONAL LOOM CHECK-UP

There is so much of interest in the world of weaving that it is sometimes a puzzle to select the most timely project. Here we are, in the depth of winter, but tailors are booking spring suit orders, and we must get our lengths woven if we are to appear in the "Easter Parade". Therefore, we think advice on fine suitings will not be amiss.

Then, too, for some time we have had looms and their ills on our minds. Having a weakness for charts, we have prepared one to help you get the utmost efficiency from your loom. Last year, it fell to our lot to have charge of a small nephew (8) and niece (9) for three months, and daily instructions were necessary as they returned home to eat lunch alone. On the wall hung a chart, -- wash hands, set table, etc., designed to smooth out any difficulties. Upon remarking to said nephew, "Here's your daily dozen", he countered with: "No, it's our ten commandments." Either way, it served its purpose, and we hope the present chart will do likewise.

First, though, our suitings. For those who prefer tweeds, we cannot better the advice given in our March, 1944 issue, and we find the homespuns from the St. Stephen Woolen Mills, St. Stephen, N.B., very satisfactory for heavy suitings and coatings. For lighter weight suitings, we are most fortunate at the present time in having readily available an excellent worsted yarn, manufactured by the well-known firm of Paton and Baldwin. This is known as their 16/2 yarn, a two-ply weight. Here are the actual figures on one skirt length, to help in calculating requirements and  .
costs for your own projects:

1080 warp ends (30 ends per inch), 3½ yards long, required for warp and weft: 1 lb. 7 oz. of 16/2's and gave a finished (washed and pressed) length of material 32" wide, 2½ yards long.

Some new weavers are not familiar with the difference between a homespun and a worsted yarn. For homespun, the wool is usually carded once and spun without any particular care being given the staples or long fibres of the wool; a worsted is combed and combed until the fibres are lying smoothly alongside each other, then the yarn is spun carefully to preserve this smoothness. Hence a worsted produces a smooth-finished, fine-textured yardage.

This 16/2 (and some in 15/2) yarn comes in what is, considering the times, a quite good color range. The trade name is "Weavcraft" yarn, and it comes in white, sunny yellow, azure blue, bright red, dark brown, navy, black, wine, Hunter's green, and beige. The cost is $2.85 per pound, and the rapid calculator will have it placed at $1.75 or thereabouts per yard to weave the skirt length mentioned above.

For plain colored suiting, our favorite is a Dornik twill:

<table>
<thead>
<tr>
<th>Standard tie-up</th>
<th>Dornik twill threading draft</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Begin</td>
</tr>
<tr>
<td>XXXXXXX</td>
<td></td>
</tr>
<tr>
<td>XXXX</td>
<td>4</td>
</tr>
<tr>
<td>XXXX</td>
<td></td>
</tr>
<tr>
<td>XXXX</td>
<td>3</td>
</tr>
<tr>
<td>XXXX</td>
<td>2</td>
</tr>
<tr>
<td>XXXX</td>
<td>1</td>
</tr>
<tr>
<td>1 2 3 4 A B</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When this is set at 30 ends per inch, and woven with treadles 1, 2, 3, 4 and repeat, it has a lovely quarter-inch line effect with the twill showing in between. This material is simply grand to tailor and can be cut without undue fraying. The close weave keeps the shape of the garment as it should be. For this we recommend using the same color warp and weft. Our sample is the lovely red, but it is equally attractive in the other colors.
When we use this 16/2 yarn as a tabby fabric, we set it at 24 ends per inch. This gives a very fine, close weave, and again we recommend using one color warp and weft. It would be set up in the usual 4-harness twill with the standard tie-up, and woven with the tabby treadling: harnesses 1&3 and 2&4 alternately.

One of our weavers has designed some truly lovely plaids, using these "Weavcraft" yarns. She is Mrs. E. Wall of Norwood, Manitoba, and has used these plaids for skirtings, and for outdoor shirts for her sons. The sons are to be envied as they step into the sporting scene clad in these gay, pure woolen shirts. Mrs. Wall tailored them herself and her sons are extremely pleased with them. Here indeed is a field of endeavor for willing weavers, from the Maine woods to the Redwoods, and from the "Far North" to the mountains of Mexico. For skirtings, they look very smart combined with plain jackets or sweaters of matching yarns. We are most grateful to Mrs. Wall for allowing us to pass on her designs. Since these will no doubt set many of our readers to work at the drafting table, we hope they, too, will in turn share their ideas with us.

**PLAID #1. - For those who love "blues"**

Warp setting, 24 ends per inch, "Weavcraft" 16/2 in azure, navy, and red, set up in a twill and woven 1,2,3,4 and repeat.

The warping plan works out to:

- 72 ends navy (3")
- 8 ends azure
- 8 ends navy
- 8 ends azure
- 16 ends navy
- 4 ends azure
- 2 ends red
- 28 ends azure = 192 warp ends for one pattern repeat of the plaid
- 2 ends red
- 4 ends azure
- 16 ends navy
- 8 ends azure
- 8 ends navy
- 8 ends azure
In weaving (treadles 1, 2, 3, 4, etc.) enough weft shots have been thrown so that the squares are a trifle elongated. This produces an excellent effect in this plaid. The warp colors are the same as the warp colors, and used in the same order.

PLAID #2. A brown, touched up with yellow, red, and white warp setting 24 ends per inch, "Weavcraft" 16/2 in brown, yellow, red, and white, set up in a twill and woven 1, 2, 3, 4...
The warping plan works out to:

- 12 ends yellow
- 4 ends brown
- 4 ends red
- 4 ends white
- 4 ends red
- 36 ends brown

64 ends for one repeat of the plaid

The weft shots were thrown in the same sequence, beaten to a 50-50 fabric, making each square on the diagonal a true square.

**PLAID #3 is a small squared effect, with yellow predominating**

Warp setting, 24 ends per inch, "Weavecraft" 16/2 in brown, yellow, red, and white, set up in a twill and woven 1, 2, 3, 4 and repeat.

The warping plan is:

- 20 ends yellow
- 6 ends brown
- 6 ends red
- 6 ends brown
- 20 ends yellow
- 18 ends brown
- 4 ends white
- 18 ends brown
- 4 ends white
- 18 ends brown

= 120 ends for one pattern repeat of the plaid
Here again the plaid is woven square, using the 1, 2, 3, 4 treadlings, with the weft colors in the same order as the warp colors. The sample shows slightly more weft shots to the inch in order to produce the squares, with an excellent result. For those weavers who do not habitually weave the diagonal: We always begin at the lower right hand of the warp as one sits at the loom, and progress with our squares across and up the warp at a 45° angle. Weaving crossed by this line is on the "diagonal"

**Planning Plaids.** It is most important in planning your own plaids that the effect of one color on another be considered. Proportion in relation to the whole must also be considered. Colored pencils will help in planning, but we recommend weaving a good sized sample before actually warping for the length of material.

**Finishing.** As with all our yardages, when these plaids are taken from the loom they are washed in lukewarm water with mild soap solution, hung to dry straight, then steam pressed.

For future reference, a record should be kept of the yarn used,
length of warp, with measurements of the material on the loom and after finishing. With this material, it is found that for shrinkage we must allow a minimum of 3-4" in width, 4-6" per yard in length.

Supply sources. One last word before we leave these lovely fabrics, - could you see them, your fingers would itch to be at them. Weavcraft 16/2 is available at

T. Eaton Co., Winnipeg, Manitoba
Searle Grain Co., Winnipeg, Manitoba
Lewis Craft Supplies Ltd., 8 Bathurst St.,
Toronto, Ontario

We have no other eastern Canadian addresses at the moment. If you know of any, may we have them? Mrs. Brownell of the Searle Grain Co. tells us that she fills a great many American orders; we are not certain whether the T. Eaton Co. has the customs information at hand. (For your information, we have no connection with any firm of weaving supplies, and handle none ourselves, - we merely pass the facts on to you as we get them.)

-------------------

Does anyone know where one of our weavers can obtain a second hand copy of Mrs. Atwater's SHUTTLE-CRAFT BOOK OF AMERICAN HAND-WEAVING? The MacMillan Company, Toronto, tells her that the book is presently out of print and cannot state definitely when a new reprinting will be ready. Information sent to Mrs. Sandin will be passed on to this weaver.

-------------------

Good Weaving!

Mary Sandin
Mrs. R. B. Sandin
University of Alberta
Edmonton, Alberta

Ethel Henderson
Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba

Per year $3.00
sample copy .35
Copyright 1946
<table>
<thead>
<tr>
<th>Part of Loom</th>
<th>Tools</th>
<th>Adjustment</th>
<th>Your Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot loom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuts and bolts</td>
<td>wrench, pliers</td>
<td>Tighten; replace damaged or missing ones.</td>
<td></td>
</tr>
<tr>
<td>Horses or top cords</td>
<td>tape measure</td>
<td>Check length for stretching.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do you need new cords; are knots unsightly?</td>
<td></td>
</tr>
<tr>
<td>Secondary cords to heddle frames</td>
<td>tape measure</td>
<td>Are your frames hanging exactly level? New cords are only about 20 cents.</td>
<td></td>
</tr>
<tr>
<td>Heddle frames</td>
<td>T-square</td>
<td>Are your frames well made? Some old looms can be much improved with squaring up the frames. Check beams and uprights too.</td>
<td></td>
</tr>
<tr>
<td>Heddle frame level and Reed</td>
<td>cord</td>
<td>Run a length of cord from back beam through reed to front beam and tie to beams. Raise or lower heddle frames until heddle eye is at the string. This applies to a counterbalanced loom. On a rising shed or jack type floor loom, the string's position is as noted later for the table loom. The reed height should be such that when it is in the rest position next to the harnesses, the cord comes through the reed's centre.</td>
<td></td>
</tr>
<tr>
<td>Heddles, string</td>
<td>soap, water starch</td>
<td>Wash heddles. First run a heavy cord through loops at top and bottom before taking from frames, to keep easy to handle. Starch, stretch to proper length, and dry.</td>
<td></td>
</tr>
<tr>
<td>Part of Loom</td>
<td>Tools</td>
<td>Adjustment</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Heddles, metal</td>
<td>gasoline</td>
<td>Dip in gasoline to clean, if necessary. PRECAUTIONS when you use it! Watch for damaged heddles and discard. Do not leave many unused heddles on frames. Run string through top and bottom while on heddle frame, slip off and roll, - they go back on easily when needed.</td>
<td></td>
</tr>
<tr>
<td>Cords or wire rods to lamms</td>
<td>pliers</td>
<td>When heddle frames are tied evenly together, are these cords exactly the same length?</td>
<td></td>
</tr>
<tr>
<td>Lamms</td>
<td>pliers, washers</td>
<td>Lamms should work easily, be level with each other when at rest, should have washers between them to work more smoothly. &quot;At rest&quot; should be slightly up from their attachment.</td>
<td></td>
</tr>
<tr>
<td>Tie-up</td>
<td>Cords, Snitch knots</td>
<td>Do you use a direct tie always? Why? A standard tie-up is much easier on you. Many weavers prefer their tabby treadles in the centre, - it's a matter of choice.</td>
<td></td>
</tr>
</tbody>
</table>

**Standard American Tie-up**

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

Sinking shed, or counterbalanced.
2 up, 2 down.

**Swedish Tie-up**

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

Tabby.

Have pedals at about a 40° angle. After using, check on snitch knots again.

See February 1944 for full detail.
<table>
<thead>
<tr>
<th>Part of Loom</th>
<th>Tools</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE LOOM</td>
<td></td>
<td>Run a length of cord from back beam through a heddle eye to the front beam and tie to beams. This cord should lie below the level of the two beams at an angle equal to the angle produced by the lift of the harnesses on the warp when the shed is opened. This insures an equal pull on the warp, and is imperative.</td>
</tr>
<tr>
<td>Heddle frame position</td>
<td>cord</td>
<td></td>
</tr>
<tr>
<td>Heddle Frame level</td>
<td></td>
<td>Adjust cords, add new ones if necessary.</td>
</tr>
<tr>
<td>Cords, washers, nuts, bolts, and lifting device.</td>
<td></td>
<td>Replace frayed cords. Check on lifting device for sticking or raising frames unevenly. See that frames raise warp evenly and that frames keep level.</td>
</tr>
<tr>
<td>Heddles and Heddle frames</td>
<td></td>
<td>Check as outlined above for foot loom.</td>
</tr>
</tbody>
</table>
MINIATURE WHIG ROSE, - A BORDERED ARRANGEMENT
for wall panel, runner, tray cloth, etc.

FILE OF WEAVING EQUIPMENT

Letters reaching us from various parts of our continent
tell of a trend toward the smaller type of loom. Space problems,
it seems, are affecting us in many ways. We agree that it is
discouraging to see attractive weaves and then discover that they
are arranged for a wider loom than we possess. Because of the
many potentialities of a loom of about 20" width, we propose to
devote several issues to pointing out and describing a few of them.

For the tailor, cloth of a narrow width is not generally
desired, but is possible. A jacket can very easily and smartly
have a seamed back, a skirt can have four seams, and the only
adjustment needed for the loom is to calculate the extra yardage
needed to compensate for the lack of width. So we say, go ahead
and weave tweeds, and fine suitings and skirtings, plaid, etc., on
your narrower looms without fear. (March, 1944 and February, 1946)

Luncheon sets need no re-arranging, and even a coverlet
can be successfully woven in four pieces, with a seam up the centre
and one at each border. Careful weaving will make the seams
almost unnoticeable. Tray cloths and wall hangings also come
within this size range.

Rugs can be woven and joined without difficulty, using
either a rep technique or the "Flossa", -- of which more in a
later issue.
Cushions are very feasible in a 20" width, and chair sets, of which there seems to be a great dearth, are done on the luncheon set width. For chair sets, use the same width set-up as place pieces and hem or fringe overcast at the edges. For these, we suggest the following examples from previous LOOM MUSIC issues:

1. Twill set-up, January 1944, in all beige, or in linen.
2. M's and O's, October, 1944. This has proved to be a most useful and appealing set. We know of weavers who have made and sold hundreds of yards. Lots of linen available.
3. Towel set-up, November 1944. Choose one band of color for each end.
4. All over lace, January 1945: #1. Cut down selvage to 16 threads, centre 16 repeats. Use any desired color, or linen, -- it's lovely. #2. Selvage 16 ends
   \[ \text{Balance} \quad 17 \text{ ends} \]
   \[ \text{Selvage} \quad 16 \text{ ends} \]
   \[ 219 \text{ ends} \]

5. The "Periwinkle" variations, June 1945, will double for bags, cushions, chair sets. We saw one black bag using a black warp and pure silk weft from an old sweater that was finer than any in the shops (the bag, not the old sweater!) Use Cordeé and similar wefts, interlining the bags and finishing with zipper tops.

6. Bands of Spanish Open Work are good looking on chair sets (July 1945). Also use Gauze weave bands (August 1945), using beige or cream warps for these two types.

Bags and purses, even upholstery, come within the scope of the 20" loom, and where seams in curtains are not unsightly, glass curtains and draperies.

One seldom sees a book of weaving patterns without some form of the "Whig Rose" in 4-harness overshot. We arranged it as a coverlet in our April 1944 number. As usually written, a single repeat of the pattern covers \(3\frac{1}{2}\) inches. This allows for little repetition on the narrow loom if a border is included as well.

Josephine P. Estes shows, in two articles in THE WEAVER (July 1936, July-August 1940) several drafts known as "Miniatures". These are not always a reduction of the original draft, but a "miniature" reproduction. Mary M. Atwater gives a group of
miniatures in her RECIPE BOOK, from which we took our Miniature Whig Rose draft and arranged it with a 3-3/4" border having a "table" corner arrangement. These miniatures, warns Mrs. Atwater, must not use coarse materials, as they are suitable only to fine set-ups.

When this bordered arrangement was shown to one of our weaving friends, it was just what she wanted to use for a wall hanging in a particular spot. Mrs. C. A. Brine of Edmonton wove the panel, about 18" by 26", using a soft salmon-beige unmercerized pattern weft with 24/3 natural warp and tabby, and it makes a harmonious spot of color in her entrance hall above a very special antique rush-bottomed chair. She used a salmon-beige candlewick cotton, split, so that three strands were used, which worked very well for overshot weaving. She used the same arrangement for several other pieces. One was especially nice, with a white 6-strand mercerized cotton pattern weft on the 24/3 natural warp and tabby, made into a tray cloth destined to be a wedding gift.

**THE DRAFT**

![Draft Diagram]

**Pattern**

![Pattern Diagram]

**TIE-UP**

For Counter-balanced loom:

- For Counter: 4
- For Rising Shed or Table loom:
  - 1
- 1 2 3 4 A B tabby
### THREADING PLAN

<table>
<thead>
<tr>
<th>Description</th>
<th>Ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border</td>
<td>114</td>
</tr>
<tr>
<td>Pattern, repeated 7 times (7 x 44)</td>
<td>308</td>
</tr>
<tr>
<td>Balance thread on harness 1, after 7th repeat</td>
<td>1</td>
</tr>
<tr>
<td>Border, reversed</td>
<td>114</td>
</tr>
</tbody>
</table>

537 ends at 30 ends per inch = 18" wide.

### THE WARP

24/3 Egyptian, or 16/2, or 20/2 (Lily Mills), set at 30 ends per inch (2 ends per dent in a 15-dent reed)

### TABBY

The same as the warp.

### PATTERN WEFT

The sample before us uses 3 strands of a soft yellow candlewick cotton (split 4 ways). A similar effect would be obtained by splitting Lily's stranded filler, or you might still have some of Bernat's Vittora Strand on your shelves. Lily's soft twist would also be suitable. For a dressier effect, use a 6-strand mercerized floss. Avoid a hard twisted thread like Perle cotton, since it is too stiff.

To judge whether your thread weight matches the treadlings given below, treadle 3 about 4 times, -- the resulting little row of squares at the corner should have each unit about square. If not, adjustments in the number of treadlings can be made to obtain this effect.

### THE TREADLING - Use tabbies A and B, alternately, throughout.

<table>
<thead>
<tr>
<th>Hem</th>
<th>2&quot; tabby for turn-under</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treadle</td>
<td>4 once</td>
</tr>
<tr>
<td></td>
<td>3 once</td>
</tr>
<tr>
<td></td>
<td>2 once</td>
</tr>
<tr>
<td></td>
<td>1 once</td>
</tr>
</tbody>
</table>

repeat 4 times -- this gives a hem which matches the under side of your piece.

<table>
<thead>
<tr>
<th>Border</th>
<th>1 once</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treadle</td>
<td>2 once</td>
</tr>
<tr>
<td></td>
<td>3 once</td>
</tr>
<tr>
<td></td>
<td>4 once</td>
</tr>
</tbody>
</table>

repeat 4 times

Treadle 1 once

2 4 or 5 times - so that the last two shots bind together (lie together) with one warp end covering in between the little corner blocks.
Border continued
Treadle 3 4 times
4 4 " 
3 4 " 
4 4 " 
3 4 times 
2 4 times
Treadle 3 once
4 once
1 once
2 once
repeat 3 times, omitting the
last treading on pedal 2
end of border

Pattern ★ Treadle 2 twice
1 once
4 once
3 once
Treadle 2 once
1 twice
2 twice
1 twice
2 once
small rose

Treadle 3 4 times
4 3 times
3 2 times
4 3 times
3 4 times
Treadle 2 once
1 twice
2 twice
1 twice
2 once
small rose

Treadle 3 once
4 once
1 once ★

Repeat from ★ for the desired length, then
Treadle 2 once
Then repeat border and hem treadlings, in reverse order.

Just a word -- set up a long warp, as this is such a
lovely set-up you'll want it in many color combinations and
varieties of weft.

---

THE VICTORIA HAND WEAVERS' GUILD
has pleasure in announcing a Summer
School of Hand Weaving conducted by
Mrs. M.M. Atwater, Basin, Montana, will
be held in Victoria, B.C., from July 8
to July 20 inclusive, 1946.
For full information and appli-
cation forms please write the Secre-
tary, Mrs. W. Coulter, 178 Beach
Drive, Victoria, B.C.
FILE OF WEAVING EQUIPMENT, or
"What the well-equipped weaver might like to have"

It is obviously beyond our ability to list every manu-
ufacturer and vendor of loom equipment, but we will welcome names
and addresses for our reference file, for publication in the near
future. As we have no connection or understandings with any
business firms whatsoever, we welcome one and all to our pages.

<table>
<thead>
<tr>
<th>Article</th>
<th>Remarks</th>
<th>Price range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOOMS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rigid heddle and two-harness</td>
<td>Used in schools, youth centres, hospitals, etc., usually from 8&quot; to</td>
<td>Aluminum heddle $2;</td>
</tr>
<tr>
<td>types</td>
<td>15&quot; wide</td>
<td>frames by local</td>
</tr>
<tr>
<td></td>
<td>Plans for small rigid heddle looms in LOOM MUSIC, August, 1945.</td>
<td>carpenters.</td>
</tr>
<tr>
<td></td>
<td>Plans for 2-harness type from Lou Tate, Louisville, Kentucky.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Also some plans from the Extension Service, Univ. of British Columbia,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vancouver, B.C.</td>
<td></td>
</tr>
<tr>
<td>4-harness Table Looms</td>
<td>Used in hospitals, schools, and in homes where space is a factor.</td>
<td>20&quot; width about $30</td>
</tr>
<tr>
<td></td>
<td>8&quot; to 30&quot; wide</td>
<td></td>
</tr>
<tr>
<td>4-harness Foot Loom</td>
<td>1. Jack Type. Used by most Swedish weavers and kindred spirits; some</td>
<td>$50 up</td>
</tr>
<tr>
<td></td>
<td>have overhead batten. Also a specialty of some particular loom builders.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20&quot; to 45&quot; wide</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Counterbalanced Type, 27&quot; to 90&quot; wide</td>
<td>$34 up</td>
</tr>
<tr>
<td>8-harness Foot Loom (and up)</td>
<td>Jack and Counterbalanced types, for multiple harness weaving</td>
<td>$75 up</td>
</tr>
<tr>
<td><strong>HEDDLES</strong></td>
<td>Steel wire, or steel flat, or aluminum flat type</td>
<td>From $5 per M up for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wire; $9 per M for</td>
</tr>
<tr>
<td></td>
<td></td>
<td>flat type.</td>
</tr>
<tr>
<td><strong>STEEL HEDDLE BARS</strong></td>
<td></td>
<td>25¢ each up</td>
</tr>
<tr>
<td>** AUXILIARY HEDDLES**</td>
<td>To hook in at spots where errors have occurred</td>
<td>50¢ per doz.</td>
</tr>
<tr>
<td>Article</td>
<td>Remarks</td>
<td>Price range</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>REEDS</td>
<td>6 dents per inch to 60 dents per inch, sold by length. Suggested order in which to buy reeds: #15,12,18,10,20,8</td>
<td>$1.25 up</td>
</tr>
<tr>
<td>CORDS</td>
<td>If not supplied, use Venetian blind cord in various weights.</td>
<td></td>
</tr>
<tr>
<td>Hooks, tools,</td>
<td>Usually supplied with loom</td>
<td>25¢ up</td>
</tr>
<tr>
<td>crank, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHUTTLES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flat</td>
<td>For tabby or rigid heddle looms</td>
<td>50¢ each</td>
</tr>
<tr>
<td>Rug</td>
<td>For heavy cottons</td>
<td>75¢ each</td>
</tr>
<tr>
<td>Boat</td>
<td>Light boat shuttle</td>
<td>$1.25 up</td>
</tr>
<tr>
<td></td>
<td>Heavy boat shuttle</td>
<td>$5.00</td>
</tr>
<tr>
<td>BOBBINS</td>
<td></td>
<td>5¢ each</td>
</tr>
<tr>
<td></td>
<td>for light boat shuttle</td>
<td>10¢ each</td>
</tr>
<tr>
<td>WARPING DEVICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frame</td>
<td>Warps 8 to 10 or more yards, depending on size. A space saver.</td>
<td>Usually made locally.</td>
</tr>
<tr>
<td>Warping Mill</td>
<td>Vertical; for long warps; speedier than frame.</td>
<td>$11 up</td>
</tr>
<tr>
<td></td>
<td>A horizontal type sits on a table, and is useful for invalids, etc.</td>
<td></td>
</tr>
<tr>
<td>For Sectional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beaming</td>
<td>Sectional beam - sections to screw on, or permanent type</td>
<td>$5 up</td>
</tr>
<tr>
<td>Large bobbins to hold warp</td>
<td>To be used in rack or creel, about 60 is minimum number needed</td>
<td>25¢ each</td>
</tr>
<tr>
<td>Creel or rack</td>
<td>To hold bobbins while beaming by the sectional method.</td>
<td>$11 up</td>
</tr>
<tr>
<td>Guide for warp ends and</td>
<td>To keep warp rolling on flat and evenly. Use Scotch tape to hold warp</td>
<td>$4 up</td>
</tr>
<tr>
<td>tensioner</td>
<td>ends in place after cutting.</td>
<td></td>
</tr>
<tr>
<td>BOBBIN WINDER</td>
<td>1. Hand, small size</td>
<td>$5</td>
</tr>
<tr>
<td></td>
<td>2. Large size, combined with reel for skeins</td>
<td>$11</td>
</tr>
<tr>
<td></td>
<td>3. Electric winder</td>
<td>$6.50</td>
</tr>
<tr>
<td>Article</td>
<td>Remarks</td>
<td>Price range</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>POSTAL SCALES</td>
<td>Useful for figuring costs by weight, for measuring length of material on bobbin by its weight, etc.</td>
<td>$4 up</td>
</tr>
<tr>
<td>SKEIN WINDERS and SWIFTS</td>
<td>For holding skeins</td>
<td>$1.50 up</td>
</tr>
<tr>
<td>BENCHES</td>
<td>Many types are on the market. They should be comfortable in height -- watch that knees do not hit the web, causing stretching and resulting unevenness at reed.</td>
<td>$5 up</td>
</tr>
<tr>
<td>RADDLE</td>
<td>Comb-like device used by many in warping to save threading the reed twice, in the case of warping onto beam before threading.</td>
<td>$1.25 up</td>
</tr>
<tr>
<td>LEASE RODS</td>
<td>To hold lease while threading. (it is not necessary to leave on while weaving) supplied with loom</td>
<td></td>
</tr>
<tr>
<td>BEAM APRONS</td>
<td>To hold rods for tying in warp ends. A stout drill is necessary, tacked to the full length of the beams. Usually made at home.</td>
<td></td>
</tr>
<tr>
<td>TYING-IN RODS</td>
<td>See that these are strong metal or hard wood.</td>
<td></td>
</tr>
<tr>
<td>LIGHTING EQUIPMENT</td>
<td>We have a grand light on our LeGlerc. - satisfactory in every way. Information on request (to Mrs. Henderson)</td>
<td>$5</td>
</tr>
<tr>
<td>COP HOLDER</td>
<td>We had wooden holders turned to fit into cops, the holders with a 3/8&quot; base, 1½&quot; long. These fit into holes drilled into an 18&quot; length of 2 x 4.</td>
<td></td>
</tr>
<tr>
<td>CONE HOLDER</td>
<td>When using cones, we remove the cop holders and insert 3/8&quot; dowel rods to hold cones</td>
<td></td>
</tr>
</tbody>
</table>

Mrs. E. M. Henderson  
20 Ritz Apartments  
Winnipeg, Manitoba

Mrs. R. B. Sandin  
University of Alberta  
Edmonton, Alberta
THE "BARLEY CORN" WEAVE TWO WAYS - FOR TOWELS AND FOR LACE

The Barley Corn is a weave which belongs to the "Spot" or "Bronson" family. It is so named in German weaving books, and whether called Bronson, Spot or Barley Corn, is a weave of great usefulness. In the chapter on Barley Corn Weave, Marguerite Davison gives many examples in her "Handweaver's Patter Book", and interesting patterns follow the use of these drafts. The Barley Corn is one of the linen weaves, but we are going to tell you of an example where cotton comes up smiling when so drafted.

We were loaned a head-covering from the Ukraine -- it looks exactly like an out-size towel -- two yards long and 18 inches wide. It has several items of interest to hand weavers:

a. It is a superb fine hand-towel texture.

b. The pattern consists of short 3-thread skips on the right side, while the under side resembles huck-a-back.

c. Chalk white cotton is used in two weights, plus a deep ecru cotton.

d. A narrow band of orange at each end uses transparent glass beads as a decor. This is not garish, as one might suppose, but is carried by the dignity of the whole piece.

e. The weave proved to be a 5-harness Barley Corn.

f. We have adapted for you a 4-harness arrangement which is somewhat similar, giving much the same texture.

g. By varying the warp setting, a transparent, lacy weave results, the pattern being raised against a tabby background, -- a most satisfying effect.
4-Harness Barley Corn Draft

Usual 4-Harness Tie-up for this weave

for a counterbalanced loom for table, or "jack type" loom

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>A B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

tabby

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

tabby

Our Tie-up

Because we like the heaviest pull to come at the end of
the lamms, we make our tie-up arrangement as follows. Do tie
your loom this way, - it is so convenient. Don't use both feet
for one treading combination unless impossible to do otherwise:

for a counterbalanced loom for table, or "jack type" loom

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>A B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

tabby

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A B</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

tabby

readles 1 2 3 4 5 Treadles 1 2 3 4 5

For convenience, we will refer to these lower numbers
in our treading directions which follow.

A. COTTON TOWEL, 4-Harness

Warp for Towelling

The warp is a soft spun cotton, 30/2 if obtainable; if
not, 50/3 Egyptian (in a pinch we used 24/3 Egyptian and it was
satisfactory -- slightly heavier texture, that's all). The warp
must be set at 60 ends per inch, to be firm enough, whatever weight
is used. Reckon on 1075 yards of cotton per yard of warp. Since
these warps usually come in 5,000- or 10,000-yard cones, it will
be seen that a 10,000-yd. cone will give a warp nearly 10 yds. long.
**Threading Plan**

For a good sized towel, let us use 18" width - 1080 ends.

24 repeats of pattern draft, \[24 \times 44 = 1056 \text{ ends}\]
Add threads 1 to 25 for balance \[\frac{25}{1081} \text{ ends}\]

Thread this single in the heddles, 4 ends per dent in a 15-dent reed, (or 3 ends per dent in a 20-dent reed).

As in all weaves of the Bronson, Spot, or Barley Corn type, one-half the draft is found on one harness, usually the harness nearest the front of the loom, No. 1 harness. Therefore 541 heddles will be needed on #1 harness, 194 heddles on harness #2, 246 on harness 3, 100 on harness 4. One sees, with this tie-up, that Tabby A uses harness #1 alone, and Tabby B uses all the rest of the harnesses, -- 2,3,4.

**The Weft**

Three wefts are used:

1. A cotton about 8/2, or Frost-tone, or Lily's 20/4, for pattern weight, in white.

2. White 30/2, 50/3, or as a last resort, 24/3, for tabby.

3. Deep ecru or any other desired color for the tabby bands, also in the fine tabby weight.

**The Treading**

The towel is designed with colored tabby bands at each end, setting off pattern bands in white, with a diaper (all-over) patterned centre. We will note the bead band where it comes in, just by way of interest.

The original towel was finished with a double row of hand hemstitching, 4 threads to a pick, and fringed with a 3/4" fringe. Hems can always be added, if preferred.

In weaving this towel, beat up the weft very firmly -- throw shuttle, beat twice, change shed, beat twice, using sharp
taps to beat.

1/2" in tabby, using 30/2 white (treadles 1 and 2 alternately). Weave more if hem is desired.

UNIT I
1. 10 shots tabby, using fine ecru.
2. 1 shot Treadle 5, 1 shot Treadle 4, using heavy white weft, no tabby.
3. 3 shots ecru tabby.

TABBY NOTE: When weaving pattern, only one tabby treadle is used: a pattern shot is always followed by Tabby 3, or pedal 2, which, in the 4-harness Barley Corn, represents harnesses 2, 3, 4 together. However, where instructions say to weave in tabby (e.g. (1) and (2) above), treadles 1 and 2 are used alternately.

TABBY NOTE: Treadle numbers refer to the lower line of figures shown in "Our Tie-Up" on page 28.

4. Using heavy white weft and white tabby Treadle 5,4,3,5,4,3, with a B tabby after each pattern shot.
5. 3 shots ecru tabby.
6. With heavy weft, 1 shot Treadle 3, 1 shot Treadle 4.
7. 5 shots ecru tabby.
8. Here is found the intriguing bead arrangement. The beads are smaller than 1/3" in diameter, with a large hole, and are woven on an orange tabby background, thus: Enough fine orange weft is measured off for 7 shots of weft plus turn-ins. Fifty-two pairs of beads are threaded on this weft, in this order: 2 red, 2 green, 2 red, 2 blue. This weft is wound on a flat shuttle with the beads clustered at the half-way mark of the length of weft. With the next tabby shed open, and considering the top half of the warp threads only, a pick-up stick is inserted under the first 6 warp ends; then across the balance of the width it is inserted over 5, under 5, over 5, finally passing under 6 ends at the left hand edge. The pick-up stick is turned on edge and the shuttle placed through this opening. The beads are placed in pairs at the spaces where the pick-up stick passed over the warp ends, the stick is removed and the weft with its beads is beaten back into place. Three more shots of the orange tabby are woven, and the orange ended off.

9. 5 shots ecru tabby.
10. 2 shots heavy weft, treadle 3, treadle 4
11. 3 shots ecru tabby
12. Repeat Border A (#4 above)
13. 3 shots ecru tabby
14. 2 shots heavy weft, treadle 3, treadle 4.
15. 10 shots ecru tabby.

The above unit, Unit I (numbered 1 to 15), should make about two inches of weaving.

UNIT II
16. Using heavy white weft and white tabby, Treadle 5,4,3,5, with a B tabby after each pattern shot.

Border B
17. 3 shots ecru tabby

18. Using heavy white weft and white tabby, Treadle 3, 5, 4, with a B tabby after each pattern shot. \[ \text{Border C} \]

19. 3 shots ecru tabby

20. Using heavy white weft and white tabby, Treadle 4, 5, 4, 3, 4, 5, 4, with a B tabby after each pattern shot. \[ \text{Border D} \]

21. 3 shots ecru tabby

22. Repeat Border C

23. 3 shots ecru tabby

24. Repeat Border B

   This ends Unit II, which should weave about 1-3/4".

25. 1/2" ecru tabby

UNIT III

26. Using heavy white weft and tabby, Treadle 5, 4, 5, 4, 5, with a B tabby after each pattern shot. \[ \text{Border E} \]

27. 3 shots ecru tabby

28. Repeat Border C

29. 3 shots ecru tabby

30. Repeat Border B

31. 3 shots ecru tabby

32. Repeat Border C

33. 3 shots ecru tabby

34. Repeat Border E

   This ends Unit III, which should weave about 1-5/8".

The above two units, Unit II and III, are repeated alternately, with 1/2" ecru tabby bands separating the units. They were repeated 6 times in all (3 each) in our Ukrainian piece. Before going into the diaper (all-over) centre, weave 1/4" ecru tabby.
CENTRE
Using heavy white weft and white B tabby, repeat as
Treadle 4, tabby B, 5,B,4,B,5,B,4
Treadle 3, tabby B, 4,B,3,B,4,B,3
Treadle 4, tabby B, 5,B,4,B,5,B,4

This centre is a little rosette pattern, in alternate blocks, -- lovely.

After weaving the desired length centre, repeat the pattern bands, in reverse order, for the second end.

B. THE LACE WEAVE, using the same 4-harness draft

After we had finished experimenting with our towel, we decided to try another warp setting: 24/3 Egyptian, natural, set at 30 ends per inch, 13½ inches wide, using the 4-harness draft as for the towels (p.28).

The same weight of heavy white weft was used, with a 24/3 tabby.

In the case of the lace weave we did not beat at all, just brought the beater up against the web, pressing firmly. The result was a lacy fabric of charm, suitable for chair sets, bedroom pieces for dressing tables, etc. Our choice was natural color with white, but any color could be used. We do recommend warp, pattern weft and tabby of the same color, or the heavy weft might be Lily's variegated cotton.

Treadling: Ours was treadled in an all-over or diaper fashion, although tabby bands might be introduced, as in the towel.

Lace Piece #1: With heavy weft, Treadle 3,5,3,5,3,
following each with a B tabby shot of 24/3;
Treadle 3,4,3,4,3, each followed with a B tabby shot.
Repeat for desired length, ending with the first combination of 3,B,5,B,3,B,5,B,3,B.

Lace Piece #2: With heavy weft, Treadle 4,5,4, following each with a B tabby shot of 24/3;
Treadle 3,5,3, each followed by a B shot;
Treadle 3,4, once each, without tabby shot.
Repeat for desired length, ending with the first combination of 3,B,4,B,3,B.

For a good edge, always put the shuttle just used in front of the shuttle at rest. In this way the pattern weft and tabby will catch around each other.

**General Comments on the Two Settings**

We urge you to try this towel, it is so attractive and interesting. The pattern stands up like tiny dots, and the under side shows the pattern in a "huck" type weave. The one thing **not** to do is to repeat a treadling more than once, as this gives unsightly skips on the under side.

We washed our pieces as always, and the lace we starched and ironed while still quite damp. The lace weave must be washed before the full lacey effect is seen. This arrangement is also excellent for place pieces, where a light weight effect is desired. In planning pieces of a definite finished length, be sure to allow for shrinkage, both ways.

**Beating.** We have been asked about beating rhythm.

When we beat **hard**, as for the towel, we throw shuttle, beat twice firmly, hold reed against the web, change shed, beat firmly twice, throw shuttle, etc. The towel was beaten about 40 shots per inch when Egyptian 24/3 was used, -- a finer weft would beat up to 50 or 55 shots per inch.

The lace was woven about 24 shots per inch, counting both the 8/2 pattern weft and the tabby. Here the beat was: pass shuttle, press reed against web, change shed while doing so, press gently and push the reed back, pass shuttle, etc.

*C. UKRAINIAN TOWEL -- 5-Harness Barley Corn Weave*

For those of our weavers who have the use of a loom with more than four harnesses, we add the details of the head-
covering from the Ukraine, from which we adapted the foregoing 4-harness Barley Corn arrangement.

![5-Harness Draft Diagram]

The materials, warp setting, and arrangement of pattern bands are just as outlined for the 4-harness cotton towel, beginning on page 29.

In weaving, the pattern treadlings are followed by a B tabby shot, as given in the directions for the 4-harness draft.

As a space-saver, on page 35 we have drawn the profile of the original piece, and below it are drawings and treadlings for the different bands: A, B, C, D, and E, which will be used instead of the correspondingly lettered bands in the 4-harness treadling details. The towel's centre treadlings are sketched at F.

Mrs. Stronach of Antigonish, N.S., asks us again to remind our weavers that she is no longer selling yarns for hand weaving. It seems that many inquiries are still coming for her lovely yarns, and her post card reply bill is mounting.

Miss Marjorie Hill, 29 Gorge Road, Victoria, writes that she will soon have a stock of the 16/2 Weavecraft wool, mentioned in our February, 1946 issue.

**ERRATUM:** A mistake occurred on page 21 in the Miniature Whig Rose draft. On your copy please change thread number 31 to read a "1" instead of a "3". Sorry!
PROFILE DRAFT OF ORIGINAL TOWEL, with drawings of its border and centre treadlings

Border A

Border B

Border C

Border D

Border E

All-over Centre F
A "Twill" Christmas

Early, by special request; versatile, for every need; and planned especially for you.

The Draft:

\[
\begin{array}{ccc}
1 & 4 & 4 \\
2 & 3 & 3 \\
1 & 1 & 1 \\
\end{array}
\]

The Tie-Up:

Counterbalanced Loom

\[
\begin{array}{ccc}
xx & x & x \\
x & x & x \\
x & x & x \\
1 & 2 & 3 & 4 & AB \\
\end{array}
\]

Rising shed, Table, or "jack" type

\[
\begin{array}{ccc}
0 & 0 & 0 \\
0 & 0 & 0 \\
0 & 0 & 0 \\
1 & 2 & 3 & 4 & AB \\
\end{array}
\]

The Warp. 24/3 Egyptian cotton, natural, 30 ends per inch (single in the heddles, 2 ends per dent in a 15 dent reed); 15 yards long, 13" wide (388 ends).

The Weaving: Let our imagination have full play and see the results. We present seven examples, to be used as key pieces to suggest possibilities for your own use. In each case we wove about an 18" length and turned in 3/4" hems. Allow a little extra on measurements for shrinkage, and use fast colors for safety. Because of the size of our pieces, each one would serve nicely as the first piece of a place mat set, but we hope you will use the different suggestions to help with your own personal gifts: runners, bags, scarves, aprons, dirndl skirts, towels. "Christmas gifts in May!", we hear you say, but we have had many requests to be early with suggestions.
#1 STRIPES, in equal widths, used as bands for trimming ends.

Main characteristic: strong color contrasts.

Wefts: White 8/2 or 10/2 ) We will give
Medium green 8/2 or 10/2 (Lily's) colors from
or Skytone 1411 Lily's large
Red 8/2 or 10/2 444 palette (perle
Medium blue 8/2 or 10/2 1455 cottons) as
Black 8/2 or 10/2 ) nearly as
Deep yellow 8/2 or 10/2 404 possible.

Weave: ¼" fine tabby heading, for first turn-under
2¼" white treadle 1, 2, 3, 4 and repeat
1 shot red tabby A
½" green treadle 4, 3, 2, 1 (reverses twill)
1 shot white tabby A
¼" red reverse twill treading order to
1, 2, 3, 4 again
1 shot yellow tabby A
½" blue 4, 3, 2, 1, etc., reversing twill
1 shot black tabby A
½" white 1, 2, 3, 4, etc., reversing twill
1 shot red tabby A
½" black 4, 3, 2, 1, etc., reversing twill
1 shot green tabby A
½" yellow reversing twill treading order
1 shot red tabby A
½" green reversing twill treading order
1 shot blue tabby A
5" white in reverse twill treading order to
green band just woven

Weave back through the colors for second end,
reversing twill treading on each.

Turn in finished ends of color; do not carry them
along edges.

Other uses: Bands on child's skirt, on aprons, or omit
white centre and use for summer envelope purse.

#2 A DIGNIFIED ECRIU PLACE PIECE SET

Wefts: Bleached (natural color) line linen, 10 lea size,
with narrow bands of white Perle 3 cotton.

Weave: ¼" fine tabby heading for first turn-under
2¼" natural linen, 1, 2, 3, 4 twill treading, end
on treadle 4
1 shot white perle 3, treadles 2, 3 together
(depresses harnesses 2, 3, 4)
1 shot white perle 3, treadles 1, 2 together
2¼" linen, 4, 3, 2, 1 twill treading, ending on 3
1 shot white perle 3, treadles 1, 2 together
1 shot white perle 3, treadles 2, 3 together
3¼" linen, 1, 2, 3, 4 twill treading, ending on 4
1 shot white perle 3, treadles 2, 3 together
1 shot white perle 3, treadles 1, 2 together
5" linen centre, 4, 3, 2, 1 twill treading,
ending on treadle 4

Reverse from  for second end.
#3 A RICH LOOKING SOFT YELLOW WITH SHINY WHITE BANDS

Wefts: Light yellow 8/2 or 10/2 or Skytone weight, color 406. White mercerized 6-strand embroidery cotton bands.

Weave: ¼" fine tabby for first turn-under
3" yellow in tabby weave, 3/4" to go into hem.
5/8" white strand cotton in 1, 2, 3, 4 twill
3 shots yellow tabby
4 shots white strand in 4, 3, 2, 1 twill treading
2 ½" yellow tabby
4 shots 4, 3, 2, 1 twill treading, white strand
3 shots yellow tabby
4 shots 1, 2, 3, 4 twill treading, white strand
5" yellow tabby -- centre
Reverse back from ✦ for second end.

#4 A STUDY IN BEIGES AND BROWNS

Wefts: 24/3 natural cotton, or No. 50 crochet cotton.
Dark brown 8/2 or 10/2 or Skytone weight
Lighter brown of same weight, color 1211.
Ecru of same weight, 8/2 or 10/2 or similar
Cream candlewick cotton

Weave: 2-3/4" tabby weave, closely beaten, using 24/3 natural or crochet cotton, to be hemmed back to 2" finished width.
1 shot cream candlewick, treads 2, 3 together -- turn ends in neatly.
1" dark brown broken twill, treads 3, 4, 2, 1
1 shot cream candlewick, treads 2, 3 together
5/8" light brown twill treading, 1, 2, 3, 4
✦ 1 shot cream candlewick, treads 2, 3 together
10" ecru in broken twill, treads 3, 4, 2, 1
Reverse from ✦ for second end.

#5 TURQUOISE TWILL WITH WHITE "LAY-INS"

This mat is distinguished by interesting breaks at the twill reverses -- lay-ins of groups of white threads with loops left at their ends; and the lovely turquoise color. Lay-ins of this sort, on a larger scale, make interesting "texture" drapes.

Wefts: Lily's turquoise Skytone, or similar weight "Lay-ins" of very fine white line linen, or a stiff white machine cotton, about #30.

Weave: ¼" fine tabby for first turn-under
2 ¼" turquoise in 1, 2, 3, 4, twill, ½" for hem off this width.

First lay-in is about 7/8 the distance across the piece. Around a piece of cardboard 2" wide and 10½" long, wind the white weft about 10 times and slip it off the cardboard. Open the #2 shed and lay in this 10" loop of white threads, leaving a ¼" loop extend at the
selvage and a ½" loop at the other end, on the
top side of the web.
Weave ½" turquoise in 4,3,2,1 or reverse twill
Second lay-in is just like the first, except that
it is 1½" shorter -- cut down the cardboard for
winding the white.
½" turquoise in twill, reverse to last turquoise
band -- the 1,2,3,4 twill treading
Third lay-in, as before, only 1½" shorter than the
second, still in the #2 shed and with a ½" loop
left at selvage.
½" turquoise in the 4,3,2,1 twill treading
Fourth lay-in, as before in the #2 shed, 1" shorter.
½" turquoise in the 1,2,3,4 twill treading
Fifth lay-in, as before, 1" shorter than 4th.
10" turquoise in the 4,3,2,1 twill treading.
Sixth lay-in, as before on the #2 shed, starting
from the opposite selvage and carrying 3/4 of
the distance across the piece.
½" turquoise in the 1,2,3,4 twill treading
Seventh lay-in, as before, only 1½" longer than
the sixth lay-in.
2¾" turquoise 4,3,2,1 twill treading
4" fine tabby for first turn under.

#6 A STUDY IN BANDS OF INTENSE RED, AND BLUES, inspired by a twill
sampler woven by Mrs. L. H. Irwin, Edmonton.

Use this idea for bands on aprons, dirndl skirts,
kitchen curtains, and summer purses (the latter with wefts of
carpet warp or candlewick for greater thickness).

Wefts: White 8/2 or 10/2 or similar weight
Scarlet-red Perle 5
Deep blue, about a skipper blue, Skytone, or 8/2
Light blue: Skytone, or 8/2

Weave: Do not carry colors along side -- turn in each
time neatly, ½" back into the shed.
½" fine tabby for first turn-under
2½" white 8/2, 1,2,3,4 twill (allows for 3/4" hem)
¾" white reverse twill treading (3,2,1,4)
¾" white reverse twill (1,2,3,4)
7 shots red, 1,2,3,4,3,2,1
4 shots white 4,3,2,1
5/8" deep blue broken twill treading, 1,3,4,2
4 shots red 1,3,4,2
4 shots white 4,3,2,1
7 shots red 4,3,2,1,2,3,4
4 shots white 1,2,3,4
7 shots deep blue 1,2,3,4,3,2,1
2 shots red, 3 then 1
7 shots light blue 4,3,2,1,2,3,4
2 shots red, 1 then 3
7 shots deep blue 1,2,3,4,3,2,1
4 shots white 4,3,2,1
4 shots deep blue 4,3,2,1
3/4" red, 4,3,2,1
8 shots light blue 4,2,3,1 broken twill
4 shots deep blue 4,3,2,1
4 shots white 4,3,2,1
4 shots red 4,3,2,1
10 shots deep blue 4,1,2,3,2,1,4,1,2,3
4 shots white 4,3,2,1
12 shots red 4,2,3,1 broken twill
10 shots deep blue 4,1,2,3,2,1,4,1,2,3
4 shots red 4,3,2,1
4 shots white 4,3,2,1
7 shots deep blue 4,3,2,1,2,3,4
1" white broken twill 1,3,4,2
4 shots red 1,2,3,4
4 shots deep blue 3,2,1,4
1" white 1,2,3,4, ending on 3
4 shots red 4,3,2,1
4 shots deep blue 2,3,4,1
1-3/8" white 2,3,4,3,2,1,2,3,4,3,2,1, etc., ending on 4,3,2
4 shots red 1,2,3,4
4 shots white 1,2,3,4
2 shots red, 3 then 1
8 shots deep blue 3,1,2,4 broken twill
2 shots red, 1 then 3
7 shots light blue 1,2,3,4,3,2,1
2 shots red, 3 then 1
10 shots deep blue 2,4,3,1,2,4,3,1,2,4
2 shots red 1 then 3
4 shots white 4,3,2,1
4 shots red 4,3,2,1
½" white 4,3,2,1, ending on 2
½" white 1,2,3,4, ending on 3
2½" white 4,3,2,1
¾" fine tabby for turn-under

A lot of changes, but so colorful and smart.

#7 AN "INITIATED" PLACE PIECE

Our last one is as different as can be -- for place sets where individuality is a factor. It carries an initial in the Dukagang or "Swedish embroidery" technique in the centre, with a tiny pine-tree motif in diagonal corners. A third pine-tree could be used instead of the initial, if preferred. We include it with our twills, since this embroidery technique is done most easily on a twill set-up.

Wefts: Medium blue Skytone, or 8/2 or 10/2 weight.
Bernat's Vittora strand in a deep red for the pattern motifs; or, a 6-strand embroidery cotton, Lily's Floss, or candlewick cotton split.

Weave:
Before beginning to weave, 3 3/8" in from each side, replace two white warp ends with 2 red ends, being sure the red ends are considerably longer than the piece to be woven. The four red ends should be tied at the back of the loom to the original 4 warp ends with bow knots, then brought through the heddles and reed and fastened around a pin at the start of the weaving. When this mat or set is woven, the original ends are brought back into place.
\[\frac{1}{2}\]" fine tabby for first turn-under.
With blue, weave 2\(\frac{1}{2}\)" tabby (includes 3/4" hem)
1-3/8" in from the right hand edge, let a piece
of red pattern thread weave alongside one warp
end for 5/8", while weaving this 5/8" with
blue tabby.

Our piece was woven with the right side up, so
allow the red ends to fall to the under side
of the web and clip off later, leaving \(\frac{1}{2}\)" ends
instead of turning them into the weaving.
10 shots blue tabby, ending with tabby "A"
Now, if you are using a counterbalanced loom, put
an extra tie from treadle 4, to harness 3, so
that harnesses 1, 3, 4 are depressed. With a
table loom, raise harness 2 to lay in the red
pattern shots.

We will refer to this as the pattern shed, since
the same pattern shed is used throughout the
motif -- every fourth warp end is raised, with
the intervening 3 warp ends depressed.

Begin the red tree, four warp ends to the left
of the tiny lengthwise red line you inserted.
Open pattern shed (harnesses 1, 3, 4 down and
harness 2 up) and bring a 12" length of red up
from the bottom of the web, at point marked
"x", leaving a lower end to be darned in later.
Carry red to the left over the 3 depressed warp
ends and under the 4th raised end, leaving the
long end on top.
Tabby "B" in blue
Open pattern shed and carry the red end to the
right, under one and over 3 warp ends, to the
bottom of the web. The dot in the sketch
shows where the thread made its turning on top
of the web. The turnings at the bottom of
the tree are made under the web, to avoid dot.
Tabby "A" in blue
Open pattern shed and bring red end to top, then
to the left for the next two pattern squares,
leaving end on top
Tabby "B" in blue
Open pattern shed and return red to right and
below.
Tabby "A" in blue
Open pattern shed and bring red up from bottom,
one square to left of original spot, and carry
to left for two squares, leaving red on top.
Tabby "B" in blue
Open pattern shed and return red to right and
below
Tabby "A" in blue
Continue with a pattern shot and a tabby shot,
alternately, as indicated on the sketch at
the left.

From the finish of the red tree, weave 1\(\frac{1}{2}\)"
blue tabby
2 shots red tabby
3" blue tabby -- then the initial, using the
same technique used in the pine tree, except that the turnings should all be done underneath the web.

The initial should be chosen from a "blocky" type of alphabet for this technique -- we used a "C" from the alphabet given in the March 1945 issue of LOOM MUSIC.

If you block out the chosen initial on squared paper, to actual size as was done with the pine tree, it can be centred on the warp and then woven with the same technique described above, making sure that the "E" tabby is used between the first pair of pattern shots.

Weave 3" blue tabby after the finish of the initial
2 shots red tabby
1½" blue tabby
Repeat the pine tree motif as before
10 shots blue tabby
Then 5/8" of lengthwise red, woven in with one of the warp ends, beginning at the top of the tree top at this end. Weave this 5/8" with blue tabby.
2½" blue tabby
¼" fine tabby for first turn-under.

This is a goodly amount of weaving, which accounts for the terse beginning. How are you doing on edges?

Next month we have two lovely little bags on the same twill -- collect your soutache braids, tinsels, cellophanes, etc. -- one bag sparkles gaily.

Good Weaving!

Ethel Henderson
Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba
Per year $3.00
sample copy, 35
Copyright 1946

Mary Sandin
Mrs. R. B. Sandin
University of Alberta
Edmonton, Alberta
LOOM

MUSIC

Mary Sandin
Edmonton

Ethel Henderson
Winnipeg
1. Personalized Gifts from Name Formula Drafts
2. Twill Bags

As noted last month, we have been asked by a number of weavers to include Christmas gift ideas quite early this year, to avoid that last minute rush. So, here is June with suggestions for personalized gifts from name formula drafts, plus two twill bags woven on the same warp as last month's twills.

For some little time we have been awaiting the opportunity to present to those weavers who enjoy drafting, an article sent to us for publication by Mrs. Nona Willson Pfeiffer, 4656 Biona Drive, San Diego 4, California. The notes are presented just as received, and any queries will be answered, we are sure, by Mrs. Pfeiffer. While LOOM MUSIC editors perceive some unavoidable weaknesses in the fact that four harnesses must each carry so many initials, making difficulties in writing the draft, we present the idea in the hope that it will stimulate a greater interest in the drafting side of weaving.

We suggest that you try Mrs. Pfeiffer's method of designing name formula drafts, and use the drafts so obtained for handwoven gifts. You might wish to use the name of the recipient, your own name, the name of your weaving group, the name of your studio, or some phrase which has a personal meaning. For suitable articles to weave from the drafts, we suggest that you use them in general wherever you would use similar miniature patterns. Try them for the variations we suggested in the April, 1945 and June, 1945 issues of LOOM MUSIC; try them for bags, cushions,
chair sets, towels, table pieces, bands for "peasant" aprons, bands for "dirndl" skirts, and many other articles which will occur as you become interested.

IT'S SMART TO DESIGN YOUR OWN MINIATURE PATTERNS

by
Nona Willson Pfeiffer

Since we have so few miniature patterns for weaving, why not design your own, and for that personal touch use your name for the thread-up? I have made many drafts, using this original formula, from the names of noted weavers, and from the names of women in my weaving classes. The names work up in circles, squares, stars, crosses and monotonous rows of blocks in overshot, and some in perfect Summer and Winter weave, while others may be transposed into Summer and Winter weave. Many of these are unusually attractive.

NAME FORMULA

No. 1 harness uses A B C D E F G
No. 2 harness uses H I J K L M N
No. 3 harness uses O P Q R S T U
No. 4 harness uses V W X Y Z

You will often find two or more threads together on the same harness, and in order to regulate the tabby, you will need to add extra threads. Here the draft writer has a choice of using the next thread in regular order or the return thread. For example, in the threadups listed below, the numbers below the empty spaces are the added threads.

Since all weavers know of Mary M. Atwater, I will write up her name draft. The drafts are written, beginning at the right as usual. We will use the Mary M. Atwater draft for demonstration:

MARY M ATWATER E T A W T A M Y R A M
2 143 412 143 4 1234123214321 4 341 214 341 2 (added threads
0 0 0  o o o o o o o o o 0 0 0  o 0 0  marked 0)
This draft may be written by using 4 in the place of the extra 2; and 2 in the place of the extra 4; 3 in the place of the extra 1; and 1 in the place of the extra 3. If we make these changes, the Mary M. Atwater draft would be written as follows:

\[
\text{MARY MATWATER ETAWTAMYRAM}
\]
\[
2 123 432 123 4 1432143412341 4 321 234 321 2 \text{ (added threads marked \_)}
\]

In case you find your draft written in groups which will not make an attractive overshot pattern, for example, the one we find in the Gertrude Vynne draft, we can transpose it into a Summer and winter weave:

\[
\text{GERTRUDEVYNNENNYVEDURTRSG}
\]
\[
1 1 3 3 3 3 1 1 4 4 2 2 1 2 2 4 4 1 1 3 3 3 3 1 1
\]

Let harness one or two equal Block B; let harness three or four equal block A:

\[
\begin{array}{cccc}
4 & " & A \\
2 & " & B \\
2 & " & A \\
5 & " & B \\
2 & " & A \\
2 & " & B \\
4 & " & A \\
2 & " & B \\
\end{array}
\]

Thread up the A block for as wide a centre strip as you desire and then repeat.

Four harness Summer and Winter weave is of two blocks which do not overlap, with four times as many threads as there are units in the draft. Each square in the graph paper is a unit. Number B block is threaded 1,4,2,4 for one unit, and if two units show on the draft an additional 1,4,2,4 is used. Number A block is threaded 1,3,2,3 and repeat as many times as there are units in the draft. You can see there are four threads to each unit showing on the draft.
Treadling for Summer and Winter

Block B: Pattern thread is harnesses 1 and 4 (Treadle 3)
Tabby thread is 3 and 4 (Tabby B)
Pattern thread is 2 and 4 (Treadle 4)
Tabby thread is 1 and 2 (Tabby A)

Treadle to square unit on diagonal: 3 B 4 A 4 B 3 A, etc.

Block A: Pattern thread is harnesses 1 and 3 (Treadle 1)
Tabby thread is 3 and 4 (Tabby B)
Pattern thread is 2 and 3 (Treadle 2)
Tabby thread is 1 and 2 (Tabby A)

Treadle to square unit on diagonal: 1 B 2 A 2 B 1 A, etc.

(For Summer and Winter tie up see LOOM MUSIC

The pattern may be altered without changing the design
by reducing or adding to the number of units in the draft. The
Gertrude Vynne draft may have as large a centre block as the
weaver desires without affecting the pattern.

By following the above information you should have no
trouble in drafting and weaving your name or those of your friends.

LOOM MUSIC editors will be most interested to hear
about what use you have made of Mrs. Pfeiffer's above directions.
For those of our subscribers who find the above as "Greek", by
reason of lack of opportunity to study drafting, we suggest that
you contact a weaver with drafting knowledge, for lessons, or
write to LOOM MUSIC for information as to qualified teachers.

Drafting should be a part of every weaving course.

As for ourselves, we can't resist an opportunity to
do more drafting. So we just naturally seized pencil and paper
and started to work -- the "Banff School of Fine Arts" seemed
like a good beginning.

Following Mrs. Pfeiffer's directions, and after some
juggling of the added numbers, we arrived at this draft:
On page 48 we give you a "profile" drawing of the above, in which pattern block areas are shown, rather than weaving of individual threads. Threads were added at each side of the pattern repeat to form a pleasing corner. We consider this draft would be suitable for a cosmetic bag, using the following arrangement:

**Threading Draft**

<table>
<thead>
<tr>
<th></th>
<th>Pattern</th>
<th>Edge</th>
<th>Selvage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>4 4 4 4</td>
<td>4 4 4</td>
<td>4 4</td>
</tr>
<tr>
<td>5.0</td>
<td>4 4 4 4</td>
<td>4 4 4</td>
<td>4 4</td>
</tr>
<tr>
<td>10.0</td>
<td>3 3 3 3</td>
<td>3 3 2</td>
<td>3 3</td>
</tr>
<tr>
<td>15.0</td>
<td>2 2 2 2</td>
<td>2 2 2</td>
<td>2 2</td>
</tr>
<tr>
<td>20.0</td>
<td>1 1 1 1</td>
<td>1 1 1</td>
<td>1 1</td>
</tr>
<tr>
<td>25.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Pattern, continued**

| 4 4 4 4 | 4 4 4 4 | 4 4 4 4 | 4 4 4 4 |
| 3 3 3 3 | 3 3 3 3 | 3 3 3 3 | 3 3 3 3 |
| 2 2 2 2 | 2 2 2 2 | 2 2 2 2 | 2 2 2 2 |
| 1 1 1 1 | 1 1 1 1 | 1 1 1 1 | 1 1 1 1 |
|         |         |         |         |

**Threading Plan:**

- Selvage: 8 ends
- Edge pattern: 20 ends
- Pattern draft, repeated twice: 72 x 2: 144 ends
- Pattern balance, add threads 1 to 5: 5 ends
- Edge pattern, reversed: 20 ends
- Selvage, reversed: 8 ends
- Total: 205 ends

We suggest a 50/3 or 30/2 cotton at 40 ends per inch for warp and tabby, with Perle cotton #10 for pattern. As so many compacts are large today, a 5" square plus tabby for hems is not too big for a cosmetic bag. If a 6" square is wanted, warp 24/3 cotton at 30 ends per inch.

The tie-up is the standard 4-harness overshot tie-up.
The treadling is "as drawn in", that is, each overshot block is squared on the diagonal. (Sketch, page 48, is "as drawn in"
Profile Drawing from Name Formula Draft using "Banff School of Fine Arts"

1 pattern repeat → edge

Scale: A little more than twice actual size when set at 40 ends per inch.
2. Twill Bags

As promised in our Twill issue of last month, here are two bags woven on the same warp.

The Draft

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

The Tie-Up:

Counterbalanced

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

Rising shed, Table or "jack type"

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
</tbody>
</table>

tabby

tabby

The Warp: 24/3 Egyptian cotton, natural, 30 ends per inch (2 ends per dent in a 15-dent reed, single in the heddles); 13" wide, 388 ends.

Bag No. 1 is a summer draw-string bag, with brightly colored horizontal stripes on a white background, so be sure to use fast color cottons.

The Weaving Details:

1/4" fine white tabby weave, for first turn-in 8-3/4" with white weft of 8/2, 10/2 or similar weight, using 1,2,3,4 twill treadling, end treadle 4.

3" of this is for the deep hem.

4 shots red Perle 5, reversing twill: treadle 3,2,1,4
1 shot white nubby cotton in tabby shed
4 shots red Perle 5, treadle 1,2,3,4
10 shots white 8/2: 1,4,3,2,1,4,3,2,1,4
4 shots red Perle 5, treadle 3,2,1,4
1 shot white nubby cotton in tabby shed
4 shots red Perle 5, treadle 1,2,3,4
1" white 8/2, treadle 3,2,1,4 and repeat
5 shots skipper blue candlewick: 3,2,1,4,3
4 shots light blue Perle 5, treadle 4,1,2,3
1 shot black candlewick, treadle 4
6 shots paddy green Perle 5, treadle 1,2,3,4,1,2
1/4" white nubby cotton, 1,4,3,2 and repeat
3/4 shots maize yellow candlewick: 1,4,3
2 shots white nubby cotton: 2,1
1" Turkey red candlewick, treadle 4,3,2,1, etc.
2 shots white nubby cotton, treadle 4, 3
3 shots skipper blue candlewick, treadle 4, 1, 2
2 shots white nubby cotton, treadle 1, 4
7 shots maize yellow candlewick, 3, 2, 1, 4, 3, 2, 1
1 shot black candlewick, treadle 4
10 shots white nubby cotton, 1, 2, 3, 4, 1, 2, 3, 4, 1, 2
4 shots red Perle 5, treadle 3, 4, 1, 2
4 shots black Perle 5, treadle 1, 4, 3, 2
14" white nubby cotton, 3, 4, 1, 2 and repeat

This white band is the bottom of the bag and the centre of weaving. Reverse treadlings until the beginning is reached. The measurements of the two sides should be exactly alike, so that the side seams will match perfectly.

The Finishing:

1. Sew up side seams, matching stripes carefully.

2. Turn a 3" hem at top and hem invisibly by hand.

3. Line with a light-weight cotton, hemming the lining into the bag by hand. Our lining was hemmed into the bag at the first red twill treadlings.

4. Attach 3/4" "keepers" for the cord, as sketched. Ours were white Perle 3, braided into 4-strand braids.

5. Insert two cords for drawing up the bag. Each cord should be about 27" long, inserted in the keepers all the way around the bag, then the ends knotted at opposite sides of the bag. The cords should be long enough so that the bag will lie flat to iron. Our cord was made from a 4-strand braid of white candlewick cotton, used double (8 strands), making a firm round cord.

Bag No. 2 is an entirely different draw-string bag, flat and "squatty", gathered onto a cardboard bottom, 4½" in diameter -- could be used for an evening or dinner bag. Its photograph on page 53 will give its general appearance.

This little bag is circular, gathered at the bottom onto a 4½" circle of cardboard which was covered with a piece woven especially for the purpose.

A red warp was desired, so we simply pulled forward about 24" of our 24/3 warp and brushed red permanent ink onto it with an old toothbrush. When dry, the warp was rolled back into place. The idea worked, and gave a beautiful red! (We wouldn't recommend this for a bag intended to be laundered).
The Weaving Details, Bag #2

1/4" fine white, tabby weave, for attaching top facing
8 shots black Perle 5, treadle 1,2,3,4 and repeat
1 shot gold soutache braid, treadle 1

1/2" red Perle 5, treadle 4,3,2,1 and repeat
5 shots ruby cellophane paper (Xmas wrapping), 4,1,2,3,4
5 shots red Perle 5, treadle 3,2,1,4,3
2 shots heavy white boucle, treadles 2,1
6 shots light green rayon floss, 2,3,4,1,2,3
2 shots black Perle 5, treadle 4,1
2 shots heavy white boucle, treadle 2,3
6 shots red Perle 5, treadle 2,1,4,3
1/2" white boucle, treadle 2,1,4,3 and repeat
6 shots red Perle 5, treadle 2,1,4,3,2,1
2 shots white boucle, 2,3,
7 shots black Perle 5, treadle 4,3,2,1,2,3,4
3/4" red Perle 5, treadle 1,2,3,4
3 shots dark green rayon seam binding, treadle 3,2,1
3/4" white boucle, treadle 2,3,4,1
3 shots gold soutache braid, 4,3,2
2 shots white boucle, 3,4
6 shots light green rayon floss, 1,2,3,4,1,2
2 shots dark green seam binding, treadle 3,4
2 shots white boucle, 3,2
1 shot black Perle 5, treadle 1)
1 shot red Perle 5, treadle 3) repeat 4 times
1"
black Perle 5, treadle 4,3,2,1 -- this allows for a turn-under, to be gathered onto the circular bottom.

Weave a second piece exactly the same for the other side of the bag.

Treadlings for bottom piece:

1"
red Perle 5, treadle 1,2,3,4 and repeat
5 shots black Perle 5, treadle 3,2,1,2,3
2 shots heavy white boucle 4,3
4 shots red Perle 5, treadle 2,1,4,3
1/2" heavy white boucle, 4,1,2,3
4 shots red Perle 5, treadle 2,1,4,3
2 shots heavy white boucle, 4,1
2 shots black Perle 5, treadle 2,3
11 shots light green rayon floss: 2,1,4,3,2,1,4,3,2,1,4
4 shots dark green silk seam binding, 3,2,1,4
1 shot gold soutache, treadle 3
2 shots heavy white boucle, treadle 2,1
4 shots red Perle 5, treadle 2,3,4,1
5/8" heavy white boucle, 2,3,4,1, and repeat
4 shots red Perle 5, treadle 2,3,4,1
2 shots heavy white boucle, 2,3
6 shots black Perle 5, treadle 2,1,4,3,2,1
1"
red Perle 5, treadle 4,3,2,1 and repeat

The Finishing:

1. Cover a sturdy 4½" cardboard disc with the piece woven for the bottom of the bag. Our piece was cut about 1½"
larger than the cardboard, then the edges folded under the cardboard and held by long stitches reaching from one side to the other across the cardboard.

2. Cover the under side of the cardboard disc with a piece of black taffeta lining, stitching around the edges carefully by hand.

3. Sew up side seams of the bag, matching stripes, leaving 1" unsewn at top, for inserting the cord.

4. Sew up the side seams of a black taffeta lining, the same size as the bag.

5. With the right sides of the bag and the lining placed together, sew the lower edge of the bag and lining together. Turn bag and lining right side out and press.

6. With find hand stitching, gather the lower edge of the bag and lining onto the cardboard bottom.

7. Face the top of the bag and lining together, using a 1" piece of black grosgrain ribbon, folded over in half lengthwise and stitched down by hand.

8. Run a stitching ½" below the attachment of the black ribbon, through the bag and lining, to form a casing for the cord.

9. From each side of the bag, in this casing insert two lengths of white silk cord, each cord passing completely around the bag and out at its own side, where the ends are knotted together.

-----------

Good weaving!

Mary Sandin

Mrs. K. E. Sandin
University of Alberta
Edmonton, Alberta

Ethel Henderson

Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba

Per year $3.00
sample copy .35
Copyright 1946
TEA CLOTH IN BRONSON WEAVE

In articles which appear in our weekly newspapers, and in magazine articles, lavishly illustrated in color, we read of the tremendous appeal our craft is making as an integral part of our national life. We greet this appeal with pride, and consciously beam -- Those who have heretofore had a slightly superior attitude toward our all-absorbing interest in handweaving, confess that they too are about to join us.

Many times in the past history of our continent the handweavers played a leading role in times of stress: in the pioneer scene, the American Revolution, Civil War days, in the early eighteenth century in French Canada, and in the many new homes in Canada following the influx of United Empire Loyalists, to name a few instances.

Now, once again, in our lifetime we are experiencing a period of textile scarcity. Those of us with adequate stocks of linens five years ago now find gaps appearing, and one is moved to pity the young brides in their efforts to furnish the new home.

We have for you a draft for a tea cloth, inspired by a picture in a Swiss trade magazine, worked out in Bronson weave.

Bronson weave is so named by Mary M. Atwater, because the weave appeared in a very old book (1817) by J. and R. Bronson. It is really the "spot" weave.

It is the only 4-harness weave in which small areas or
"spots" of pattern can be placed against a tabby background, other than by laying-in a design by hand. The weave is most generally found written for five harnesses in the old books, but also appears on eight or more harnesses.

The weave is very fully explained and illustrated by Mrs. Atwater in The Weaver, April-May, 1941, but for our many readers who have not access to this article we will point out some characteristics of this weave:

1. Every other warp end is threaded through heddles on harness #1. Therefore, one tabby is found on harness #1, the other tabby on harnesses #2, #3, #4 (on a 4-harness loom).

2. There are two main types of Bronson, -- the "Spot" and the "Lace", the latter development by Mary M. Atwater.

3. In the lace Bronson it is possible to have a border of lace weave surrounded by a plain tabby border, while in the spot Bronson it is possible to have small areas or spots of pattern against a tabby background.

Our tea cloth arrangement used the X's and O's draft, #263 in The Shuttle-craft Book. We wove a cloth 36" square finished, with serviettes to match. We had to use, of necessity, bleached linen, although our craving was for some added color. However, Hughes-Fawcett colored #12 would be lovely in the ribbing border, which is one of the chief features of the cloth.

We finished the cloth with a half-inch, hand hemstitched hem, with mitred corners. Our X's and O's pattern is arranged in a square in the centre of the cloth, thus:
It will be seen from the sketch that the draft consists of three parts: outer border, inner border, centre area:

The Draft

<table>
<thead>
<tr>
<th>Border</th>
<th>Begin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>etc.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Pattern

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Begin</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

The Warp: 20/2, or #30 lea linen warp, or a 24/3 Egyptian cotton natural, if linen is not obtainable.

Warping Plan: We warped 4\(\frac{1}{2}\) yards, about 42" wide, for three square cloths. It was threaded single in the heddles, double in a 15-dent reed, except for the ribbing. In the ribbing areas, 6 ends were sleyed in one dent, 3 in the next, and so on. We will give heddles affected and warp ends in the threading plan below. A ribbing on each side makes the two slightly different.

Threading Plan:

<table>
<thead>
<tr>
<th>Warp Ends</th>
<th>Heddles on Harnesses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#1</td>
</tr>
<tr>
<td>146</td>
<td>73</td>
</tr>
<tr>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>279</td>
<td>139</td>
</tr>
<tr>
<td>392</td>
<td>196</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>280</td>
<td>140</td>
</tr>
<tr>
<td>33</td>
<td>4</td>
</tr>
<tr>
<td>146</td>
<td>73</td>
</tr>
<tr>
<td>1321</td>
<td>635</td>
</tr>
</tbody>
</table>

Thus we see from the above that 1321 ends are warped,
but 1209 heddles are used: 635 on harness 1, 46 on harness 2, 544 on harness 3, and 44 on harness 4.

The Weft: For weft we used a #20 lea bleached linen, double on the shuttle, as this seemed to give us the best texture, but we advise a little experimenting on warp settings -- by setting up a 1-yard warp, 4" wide, using different warp settings and various weights weft, single and double on the shuttle. Weft linen does not need to be dressed, for the shuttle.

The Tie-up: Again, when using a counterbalanced loom we change the tie-up from standard practice so as to put the heavy pull at the end of the lamms:

**Usual Tie-up**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Our Tie-up**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Weaving: Threaded and tied-in, we are ready to weave. As the tabby in Bronson is obtained by using harness #1 against the other three harnesses, those using the counterbalanced loom must check the shed carefully. If it is not opening wide enough for the shuttle to pass through, adjustment is necessary at the top rollers. The slightest amount of raising or lowering of the harnesses at this point will affect the shed opening. If the harnesses and rollers are levelled properly, the shed will come. At no time will the shed opening be as wide as when using two harnesses against the other two, but it should prove satisfactory.

Our cloth was beaten up hard with a rhythm of "two
sharp taps, change shed with beater against web, two sharp taps, throw shuttle, etc."

Lengths should be measured with the tension off, as we have allowed for shrinkage in our 42" set-up. All measurements should be squared against warp measurements.

**The Treading:**

1. **Edge border:** With double weft on the shuttle, tabby A and B alternately for nearly 5" -- square the corner to the ribbing band.

2. **Ribbing:** Wind one flat shuttle with 6 strands of weft and another with 3 strands. Weave 7 shots, A and B treadles alternately, using the 6- and 3-strand shuttles alternately. As the edges are hemmed, the ends need not be turned in, and the regular double weft shuttle can be carried along the side for the ribbing portion.

3. **Inner border:** With double weft on shuttle, tabby A and B alternately for nearly 9-1/3", ending on tabby B

4. **Pattern centre:** The pattern is woven in two units, one treading unit for each row of spots.

```
<table>
<thead>
<tr>
<th>Unit I</th>
<th>detail of edge spot:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treadle 1 (harnesses 1 and 2)</td>
<td>— —</td>
</tr>
<tr>
<td>Tabby B</td>
<td>— —</td>
</tr>
<tr>
<td>Treadle 2 (harnesses 1 and 4)</td>
<td>— —</td>
</tr>
<tr>
<td>Tabby B</td>
<td>— —</td>
</tr>
<tr>
<td>Treadle 2</td>
<td>— —</td>
</tr>
<tr>
<td>Tabby B</td>
<td>— —</td>
</tr>
<tr>
<td>Treadle 1</td>
<td>— —</td>
</tr>
</tbody>
</table>

Then treadle as much Tabby B and A alternately as there is distance between the two spots -- about 7 rows -- ending on Tabby B.

<table>
<thead>
<tr>
<th>Unit II</th>
<th>detail of edge spot in the second row</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treadle 2 (harnesses 1 and 4)</td>
<td>— —</td>
</tr>
<tr>
<td>Tabby B</td>
<td>— —</td>
</tr>
<tr>
<td>Treadle 1 (harnesses 1 and 2)</td>
<td>— —</td>
</tr>
<tr>
<td>Tabby E</td>
<td>— —</td>
</tr>
<tr>
<td>Treadle 1</td>
<td>— —</td>
</tr>
<tr>
<td>Tabby B</td>
<td>— —</td>
</tr>
<tr>
<td>Treadle 2</td>
<td>— —</td>
</tr>
</tbody>
</table>

Again repeat 7 rows of B and A tabby alternately.
These two units, with tabby bands between, are repeated until the whole centre pattern area is square, ending with Unit I.

6. Ribbing, as before (#2)
7. Edge border, as before, nearly 5" of tabby

Finishing: We stitched our cloth on the machine and soaked it over night in cold water, then washed it in mild suds, rinsed, shook well and ironed while wet. We then drew the threads, basted in the hem, and hemstitched by hand. We tried hemstitching one serviette before washing, but it did not prove as satisfactory as the above procedure. This linen weave requires several washings to "show off" well.

The Serviettes -- Could also be Place Pieces

For serviettes, we planned a 12" square after hemming, so set them up 15 1/2" wide in the reed. We left threaded what pattern was needed for their centre and had only to re-thread the sides.

<table>
<thead>
<tr>
<th>Threading Plan</th>
<th>ends</th>
<th>heddles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edge border 2&quot;, 1,3,1,3, etc.</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>7 heddles ribbing, alternating ends of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,3,6,3,6,3,6,3,6, threaded 1,3,1,3,1,3,1,3</td>
<td>33</td>
<td>7</td>
</tr>
<tr>
<td>Inner border, 2 1/4&quot;, 3,1,3,1, etc., ending 3</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>Pattern, 3 repeats x 56 ends per pattern</td>
<td>168</td>
<td>168</td>
</tr>
<tr>
<td>Balancing group ends 1 to 12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Inner border, 2 1/4&quot;, 1,3,1,3, etc.</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Ribbing, 1,3,1,3,1,3,1,3 as above</td>
<td>33</td>
<td>7</td>
</tr>
<tr>
<td>Edge border, 2&quot;, 3,1,3,1, etc.</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>501</td>
<td>449</td>
</tr>
<tr>
<td>ends heddles</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Treading for Serviettes: Square off each unit, as in the case of the cloth:

1. Edge border, 2" tabby, with double weft thread
2. Ribbing, as for cloth
3. Inner border, 2 1/4" tabby, ending with tabby B
4. Unit I, as for cloth (p. 58)
5. Unit II,
   Repeat Units I and II alternately, ending with Unit I. Nine rows of these pattern units should square the centre.
6. Repeat inner border, ribbing, and edge border as above.
The serviettes were also finished all around with a hand hemstitched and mitred hem, one-half inch wide.

---------

Use this same draft and treadling for shawls and baby blankets.

---------

The Searle Grain Co., Winnipeg, are offering Irish linen warp, semi bleached, 18, 20, 25, 30 lea, at $3.50 per pound.

---------

At times it is possible to get linen cord, in a variety of weights from 50/3 to 12/3, made for the fishing industry, natural color, from the firm of Park-Hannesson Ltd., 55 Arthur St., Winnipeg, Manitoba. This cord (gilling twine) weaves well dry and is satisfactory warp.

---------

Good weaving!

Ethel Henderson
Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba

Mary Sandin
Mrs. R. B. Sandin
University of Alberta
Edmonton, Alberta

Per year $3.00
Sample copy .35
Copyright 1946
MONK'S BELT for HEAD SQUARES AND BAGS

We are moved to admiration more frequently by color than by any other single factor in our textile work. To be able to know instinctively, and to use wisely, color, is a rare gift indeed.

Nature is prodigal in her use of color, but we must interpret for our own use.

We are going to describe to you several examples of vivid color used on a neutral background, -- in this case a soft pearl grey. The pieces selected were woven for head squares for winter, and two bags for general utility use. These were worked out for us by Mrs. Elizabeth Munroe of Riverbend School, Winnipeg. She is a weaver of many years' experience. A pearl grey 2-ply wool warp was used, set at 20 ends per inch. The color schemes would be equally good for woolen scarves and bands for cushions or draperies. The threading draft is a very ancient one -- Monk's Belt. "Monk's Belt" has a very long history in Scandinavian countries. It is said that it was actually used in olden times for just that -- a monk's belt.

It is an overshot pattern, for 4 or 8 harnesses, belonging to the family known as "On Opposites". It gives a clear-cut spot of pattern, usually square, against a solid background. It is nearly always woven with a tabby, but in some cases, when used for upholstery for example, tabby is omitted. Our draft was taken from Hulda Peters' VA690K:
Monk's Belt Threading Draft

26

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

Warping and Threading Plan: The warp used is a 2-ply wool, set at 20 ends per inch (single in the heddles, double in a 10-dent reed). The scarves were set up 27" wide on the loom (541 warp ends), and finished all around with a 3/4" fringe, overcast in grey.

The Tie-Up is the standard 4-harness overshot tie-up:

Counterbalanced Loom

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

Rising Shed or Table Loom

<table>
<thead>
<tr>
<th>0</th>
<th>0</th>
<th>0</th>
<th>0</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

The weaving: The scarves were lightly beaten, with about 17 to 18 weft shots per inch on the loom, so that when they were washed and pressed they were a soft 50-50 tabby weave.

Scarf #1 - Canary Yellow and White bands on a grey background

Treading Details

3 1/2" Pearl grey 2-ply wool in tabby (treadles A and B alt.)
9 shots Treadle 1, using 2-ply yellow for both the 9 pattern shots and the tabby shots which follow the pattern shots (Color 1459 Lily's)
4 shots Treadle 3, using white Aralac, casein milk yarn, for both pattern and tabby.
9 shots Treadle 1, with yellow pattern and tabby
1 1/2" grey 2-ply in tabby weave
9 shots Treadle 1, with yellow pattern and grey tabby
3 shots Treadle 3, white Aralac pattern, grey tabby
9 shots Treadle 1, with yellow pattern and grey tabby
1" grey tabby weave
4 shots Treadle 1, white Aralac pattern and tabby
4 shots Treadle 3, with yellow pattern and tabby
4 shots Treadle 1, white Aralac pattern and tabby
1 1/2" grey tabby weave
9 shots Treadle 1, with yellow pattern and grey tabby
1 1/2" grey tabby weave
x 4 shots Treadle 1, with white Aralac and grey tabby
x Centre -- reverse for second end.
SCARF #2 - LAZERDAK, PURPLE and YELLOW bands on grey

3"  Pearl grey 2-ply wool, tabby weave (A and B alt.)
4   shots Treadle 1, with 2-ply lavender for both pattern
    and tabby shots (Lily's color 408)
3   shots Treadle 1, 2-ply purple for pattern and tabby
    (Lily's color 407)
3   shots Treadle 3, 2-ply canary yellow pattern and
    tabby (Lily's color 1459)
3   shots Treadle 1, purple pattern and tabby
4   shots Treadle 1, lavender pattern and tabby
1½"  grey tabby weave
10  shots tabby weave, purple and grey alternately:
    A purple, B grey, etc., for 10 shots
1½"  grey tabby weave
6   shots Treadle 1, purple pattern, grey tabby
1-3/4" grey tabby weave
10  shots purple and grey tabby alternately, as before
1¼"  grey tabby weave
6   shots lavender Treadle 1, grey tabby
   Centre -- reverse for second end

SCARF #3 - BRIGHT WINE, DEEP RED, MAGENTA, "SHOCKING PINK", on grey

3½"  bright wine 2-ply wool, tabby weave (A and B alt.)
1"   grey 2-ply wool, tabby weave
6   shots deep red Boucle de laine, Treadle 1, grey tabby
3   shots Treadle 3 with 2-ply magenta wool, grey tabby
2   shots Treadle 3 with 2-ply bright pink, grey tabby
3   shots Treadle 3 with magenta, grey tabby
6   shots deep red, Treadle 1, grey tabby
1½" grey wool tabby weave
3/4"  bright wine wool, tabby weave
6   shots Treadle 1 with grey wool, wine tabby
2   shots Treadle 3 with pink wool, grey tabby
2   shots Treadle 3 with magenta, grey tabby
2   shots Treadle 3 with pink wool, grey tabby
6   shots Treadle 1 with grey wool, wine tabby
3/4" wine wool, tabby weave
3/4" grey wool, tabby weave
5   shots Treadle 3, deep red Boucle, grey tabby
1-3/4" grey wool, tabby weave
6   shots Treadle 1 with pink wool, grey tabby
   Centre -- reverse for second end

SCARF ⅛" - BRIGHT WINE, DEEP RED, PURPLE PLUM, "SHOCKING PINK" on grey

3½" grey 2-ply wool, tabby weave (A and B alt.)
4   shots Treadle 1, deep wine magenta wool, same tabby
1   shot Treadle 3,
1   repeat twice more -- 3 groups in all
1¼" grey wool, tabby weave
7   shots Treadle 1, deep red Boucle de laine, same tabby
1¾" grey wool, tabby weave
2   shots Treadle 3, bright pink wool, grey tabby
2   shots Treadle 1, bright pink wool, grey tabby
2   shots Treadle 3, bright pink wool, grey tabby
2   shots Treadle 1, bright pink wool, grey tabby
2   shots Treadle 3, bright pink wool, grey tabby
1¼" grey wool, tabby weave
continued --
Scarf #4 - continued

6 shots Treadle 1, deep red Boucle, same tabby
6 shots Treadle 1, purple plum wool, same tabby
4 grey wool, tabby weave
4 shots Treadle 1, deep wine magenta wool, same tabby
1 shot Treadle 3, repeat last two twice more -- 3 groups in all
2 1/2" grey wool, tabby weave
6 shots Treadle 1, purple plum wool pattern and tabby
3 shots Treadle 3, bright pink pattern, plum tabby
6 shots Treadle 1, purple plum wool pattern and tabby
3/4" grey wool, tabby weave
8 shots Treadle 1, wine magenta pattern, grey tabby
6 shots Treadle 3, wine magenta pattern and tabby
8 shots Treadle 1, wine magenta pattern, grey tabby
x 3/4" grey wool, tabby weave
x Centre - reverse treadlings for second end

Bags -- Monk's Belt Threading

These bag lengths were woven on the same pearl grey 2-ply wool warp, 20 ends per inch, 27" wide on the loom. They are designed to be put onto wooden handles, the weaving being folded at the bottom with the stripes running up and down the bag. Two separate pieces are woven to insert as bag ends.

Bag #1 -- A Really Beautiful Blend of Colorful Wools

1 1/2" pale dusty rose 2-ply wool, tabby weave (A and B alt.)
5 shots dusty peach 2-ply wool, tabby weave
3 shots bright rose magenta 2-ply wool, tabby weave
3 shots darker magenta 2-ply wool, tabby weave
4 shots reddish brown 2-ply wool, tabby weave
x 6 shots deep magenta 2-ply wool, tabby weave
reverse treadlings from this x centre, except
1 1/2" pale dusty rose tabby weave instead of first 1 1/2"
8 shots reddish brown wool, Treadle 3, dusty rose tabby
4 shots Treadle 1, deep magenta, deep magenta tabby
4 shots Treadle 1, medium magenta, deep magenta tabby
3 shots Treadle 1, pink magenta, deep magenta tabby
4 shots Treadle 1, dusty peach pattern, deep magenta tabby
2 shots Treadle 1, bright yellow pattern,
4 shots Treadle 1, white pattern, deep magenta tabby
x 4 shots Treadle 3, black pattern
reverse treadlings from this x centre of bend
6 shots dusty pink wool, tabby weave
4 shots Treadle 1, soft spring green wool, dusty rose tabby
1 shot Treadle 1, black pattern, dusty rose tabby
1 shot Treadle 1, white pattern, dusty rose tabby
2 shots Treadle 3, bright magenta, dusty rose tabby
1 shot Treadle 1, white pattern, dusty rose tabby
1 shot Treadle 1, black pattern, dusty rose tabby
4 shots Treadle 1, green pattern, dusty rose tabby
x 4 Centre of the bag -- reverse treadlings to beginning of weaving.
End Bands for Bag #1 -- make two of these
1" soft dusty rose wool, tabby weave
6 shots Treadle 1, wine magenta pattern, rose tabby
4 shots Treadle 3, reddish brown wool, rose tabby
Centre of band -- reverse treadlings to beginning

Bag #2 -- BRIGHT AND EYE-CATCHING, with little grey to relieve it
3" grey 2-ply wool, tabby weave (A and B alternately)
7 shots Treadle 1, wine magenta wool, same tabby
1 shot Treadle 3, 6 strands of bright pink, pink tabby
7 shots Treadle 1, wine pattern, same tabby
6 shots reddish brown wool, tabby weave
4 shots Treadle 1, reddish brown, same tabby
1 shot Treadle 3, 6 strands of bright pink, pink tabby
4 shots Treadle 1, reddish brown, same tabby
5 shots salmon pink Boucle de laine, tabby weave
4 shots Treadle 1, wine magenta, same tabby
3 shots Treadle 3, reddish brown, wine tabby

repeat these two treadlings twice more -- 3 in all
5 shots salmon pink Boucle de laine, tabby weave
6 shots Treadle 1, purple plum, same tabby
3 shots Treadle 1, wine magenta, same color tabby
1 shot Treadle 3, 6 strand reddish brown, same tabby
Centre of bend -- reverse to 6 shots plum Tr. 1
5 shots salmon pink Boucle de laine, tabby weave
3 shots Treadle 3, reddish brown, same color tabby
2 shots Treadle 1, wine magenta, same color tabby

repeat these two treadlings twice more -- 3 in all
5 shots salmon pink Boucle de laine, tabby weave
4 shots Treadle 1, reddish brown, same color tabby
4 shots Treadle 3, bright pink, same color tabby
4 shots Treadle 1, bright magenta, same color tabby
4 shots reddish brown tabby weave
6 shots Treadle 1, wine magenta, same color tabby
3 shots Treadle 3, reddish brown, same color tabby
6 shots Treadle 1, wine magenta, same color tabby
10 shots wine and grey tabbies alternating
4 shots Treadle 1, wine magenta, same color tabby
4 shots Treadle 3, bright pink, same color tabby
Centre of the bag, reverse all treadlings to beginning.

End bands for bag were grey wool, in tabby weave throughout

NOTE TO MATERIALS: On a recent trip to the U.S. we
saw many of these colors in the retail stores. Where they are
not obtainable, try dyeing with ampolina dyes. By using
increasingly stronger quantities, these blending colors can be
obtained on a 16/2 white Weavecraft wool as a beginning.
Primary Colors: Red, blue, yellow

Secondary Colors: Green, violet or purple, orange

Intermediate or Tertiary Colors: Yellow green, blue green, blue violet, red violet, red orange, yellow orange.

Complementary Color Scheme: Colors across from each other are complementaries, and should never be used in equal quantities, or they cancel each other out to grey.

Split Complementary: By taking the color on each side of the complementary, such as, yellow, red violet and blue violet, we get what is known as split complementaries; or, yellow orange and yellow green and red violet and blue violet -- in varying quantities, of course.

Analogous Color Scheme: When we take colors side by side along the color wheel, such as yellow, yellow green, and
green, we get an analagous color scheme, which is never very exciting, but always very safe.

A small book which we find most helpful is "Everyday Art", published by the American Crayon Co., Sandusky, Ohio, $1.00 per year. While dealing with all phases of art, the color work is most usfucul, as is also the design. Color is all around us -- an everyday study as we go our daily round.

Good weaving!

Mary Sandin
Mrs. E. B. Sandin
University of Alberta
Edmonton, Alberta

Ethel Henderson
Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba

Per year $3.00
Sample copy .35
Copyright 1946

Until August 24th, our address will be Banff School of Fine Arts, Banff, Alberta.
THE TECHNIQUES OF HANDWOVEN RUGS

From time to time we have mentioned a bulletin on rugs, but have kept postponing the issue in the hope that the rug yarns would soon be back on the market in appreciable quantities. Supplies are still not too plentiful, but we have decided to go ahead anyway, answering some of the inquiries we have received.

1. What are the various rug techniques possible on a hand loom?

At first thought the field seemed quite narrow, but as one after another was recalled we found ourselves charting the weaves for clearness and brevity, -- see next two pages.

2. What is the technique for making a rug in the shortest time?

In answering, we will not consider the commonly found rag rug. For this, see our bulletin of November, 1945, on "Catalogne", the French Canadian rag rug.

It is considered by Mrs. Atwater that the double warp stuffer technique makes the most substantial rug in the shortest time. Naturally, the laying-in of a pattern adds to the weaving time. However, there is none of the well known rug weaves that can be done quickly. Originating as they did from craftsmen to whom time was a negligent factor, the emphasis has always been placed on design and its working out in color. Where the desire for speed has crept in, workmanship deteriorates rapidly, -- as we all know so well.
<table>
<thead>
<tr>
<th>Rug Type</th>
<th>Loom Type and No. of Harnesses</th>
<th>Warp Used</th>
<th>Usual Warp Setting</th>
<th>Weft Material</th>
<th>Technique Used</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Log Cabin&quot;</td>
<td>2-Harness Floor</td>
<td>Carpet Warp</td>
<td>24 ends per in.</td>
<td>Heavy Filler</td>
<td>Warp-faced</td>
<td>Alternate colors, A and B, used in warp &quot;A&quot; color used on Harness 1, followed by &quot;B&quot; color on Harness 2. Where block unit changes, 2 warp ends of one color come together, but on different harnesses.</td>
</tr>
<tr>
<td>4-Harness Warp-Face</td>
<td>4-Harness Floor</td>
<td>Carpet Warp</td>
<td>24 ends per in.</td>
<td>Heavy Filler</td>
<td>Warp-faced</td>
<td>4 colors used in the warp on the following harnesses: 1&amp;2 alternately 2&amp;1 &quot; 3&amp;4 &quot; 4&amp;3 &quot;  Four block areas result. Warp should cover weft fairly well; weft should blend in color.</td>
</tr>
<tr>
<td>4-Harness Overshot</td>
<td>4-Harness Floor</td>
<td>Linen 10/2 Strong cotton</td>
<td>24 ends 30 ends per in.</td>
<td>Heavy yarn</td>
<td>Overshot</td>
<td>Should not be used unless draft has very short skips, woven as drawn in to give small diaper pattern. Avoid as a rule.</td>
</tr>
<tr>
<td>Summer and Winter</td>
<td>4-Harness; Multiple; Floor</td>
<td>Linen, Strong cotton</td>
<td>Depends on warp</td>
<td>Depends on warp</td>
<td>Summer and Winter</td>
<td>Geometric effects</td>
</tr>
<tr>
<td>Crackle Weave</td>
<td>4-Harness Floor</td>
<td>Linen 10/2</td>
<td>24-30 ends per inch</td>
<td>Rug yarn, Heavy German-town 4-ply</td>
<td>Crackle Weave</td>
<td>Designs may resemble overshot but Crackle weave has always small skips. Block arrangements are possible, and large modernistic effects. Recipe Book, M.M. Atwater, has excellent designs plus full instructions.</td>
</tr>
<tr>
<td>Mrs. Pfeiffer's Harness Shag</td>
<td>4-8 Harness</td>
<td>See Bulletin M.M. Atwater, June, 1945.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rug Type and No. of Harnesses</td>
<td>Loom Type</td>
<td>Warp Used</td>
<td>Usual Warp Setting</td>
<td>Weft Material</td>
<td>Technique Used</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>-------</td>
</tr>
<tr>
<td>&quot;Stuffer&quot; 4-8 Harness with 2 warp beams</td>
<td>Linen or Heavy cotton</td>
<td>15 ends per in.</td>
<td>Heavy yarn, Winter rags, etc.</td>
<td>Summer and &quot;Stuffer&quot; technique</td>
<td>Loom must have 2 warp beams, for warps at 2 tensions. Rug has top and bottom layer and stuffer in between. See M.M. Atwater's June, 1946 Bulletin, for details.</td>
<td></td>
</tr>
<tr>
<td>&quot;Navajo&quot; Rug frame or Tapestry</td>
<td>Heavy linen or carpet warp double</td>
<td>10 to 12 ends per inch</td>
<td>Homespun &quot;Navajo&quot; Vege.- dyed wool</td>
<td>Tapestry technique</td>
<td>See Geo. W. James, &quot;Indian Blankets and their Makers&quot;, Tudor Pub. Co., New York; also Gladys Reichard, &quot;Navajo Shepherd and Weaver&quot; for full notes on weaving and designs.</td>
<td></td>
</tr>
<tr>
<td>Turkish Persian Oriental 2-Harness</td>
<td>Primitive Frame or Carpet warp, silks, camel's hair</td>
<td>Varies with fineness of rug</td>
<td>Homespun Ghiordes Rug yarns</td>
<td>Knot, Sehna Knot, Soumak technique</td>
<td>See text for explanation; also &quot;Notes on Carpet-Knotting and Weaving&quot;, Victoria and Albert Museum London. Finest rugs have 700 knots per square inch.</td>
<td></td>
</tr>
<tr>
<td>Chinese Rugs</td>
<td>Rug Frame Heavy cotton</td>
<td>12-15 ends per inch</td>
<td>Homespun Rug yarns</td>
<td>Sehna Knot</td>
<td>See text for explanation; also Victoria and Albert Museum pub.</td>
<td></td>
</tr>
<tr>
<td>&quot;Flossa&quot; Frame or 2-harness</td>
<td>Heavy cotton, Carpet warp, linen 10/2</td>
<td>12-15 ends per inch</td>
<td>Rug yarns Ghiordes knot tied along a spacing bar</td>
<td>Flossa is the quickest knotted rug technique: 1 row of knots followed by 2-3 rows of tabby weaving, using material similar to warp. See text.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Rya&quot; Frame or 2-Harness</td>
<td>Carpet warp</td>
<td>12 ends per in.</td>
<td>Rug yarn, homespun rags</td>
<td>Tied as Flossa, but left in long uncut loops.</td>
<td>The loops are left 4-5 inches long, with solid tabby between loop rows. Loops hang down and hide tabby.</td>
<td></td>
</tr>
</tbody>
</table>
3. What can be done to keep light-weight rugs from skidding on a polished floor.

This is a difficult query and we know of no fool-proof answer. Our own solution is to use a rug cushion, and to use a linen warp to give more body to the rug. We invite suggestions on this point.

4. Describe the rug knots.

These are the Ghiordes or Turkish Knot, the Sehna Knot, and the Flossa technique, which is the Ghiordes knot tied in a continuous operation.

**The Ghiordes Knot**

The end of rug yarn (y) is passed under 2 warp ends (A) in a Right to Left upward motion. The end (y) is then carried to the right over 4 warp ends (A and B). Without pausing in the operation, end (y) is carried under 2 warp ends B (as at first under A), right to left in an upward direction. When the ends of the rug yarn are tightened, the knot is formed.

**The Sehna Knot**

This is the Persian Knot, and is really not a knot but a twist, with one weft end coming up between every warp end instead of both weft ends coming up between every two ends (or 4 if knots are tied over double warp ends.)

The Sehna Knot permits more knots to the square inch than the Ghiordes, and the pile can be trimmed closer. The Sehna Knot is the one used in Chinese rugs, and the lack of a real knot explains why vacuum cleaners are so hard on
these rugs.

In both the Ghiordes and the Sehna Knot, a row of knots is tied across the rug, varying in color according to the design. One or two rows of tabby are then put across and the whole is well beaten down with a comb. The length of weft for each individual knot is cut by the native weaver before tying, and the trimming is done after the knot is tied. One realizes the tremendous labor involved as these processes are continued for the entire rug.

5. Is there any faster way of making a rug, using the tied knot?

The Scandinavian "FLOSSA" technique uses a Ghiordes knot and a continuous strand of weft, with a bar or rod to gauge the depth of the pile. Flossa, as a rule, is much more coarse than Oriental examples.

Mary Block, in her "Den Stora Vavboken" gives the following details:

<table>
<thead>
<tr>
<th></th>
<th>Flossa</th>
<th>Rya</th>
<th>Soumak</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warp</strong></td>
<td>35 ror pa 10 cm</td>
<td>20 ror pa 10 cm</td>
<td>50 ror pa 10 cm</td>
</tr>
<tr>
<td></td>
<td>about 8 ends per inch, single in heddle and dent (ror = dent)</td>
<td>about 6 ends per inch, single in heddle and dent</td>
<td>about 12 ends per inch, warp of 2-ply yarn.</td>
</tr>
<tr>
<td></td>
<td>Linen 12/4</td>
<td>Linen 10/5</td>
<td>Used for drapery with Soumak decorations</td>
</tr>
<tr>
<td></td>
<td>(Scale for linen 560, instead of our 300)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Selvages are 2 double ends

<table>
<thead>
<tr>
<th><strong>Weft</strong></th>
<th>1-ply yarn</th>
<th>2-ply yarn</th>
<th>4-ply yarn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabby</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knotting</td>
<td>4-ply yarn</td>
<td>4-ply yarn</td>
<td></td>
</tr>
</tbody>
</table>

**DETAILS FOR MAKING A FLOSSA RUG**

A suitable warp is carpet warp, set at 15 double ends per inch (double in the heddles and double in a 15-dent reed), or a strong linen warp. A commercial spacing bar is sold, with a slot along the length and a knife which fits into the slot, for cutting the knot ends. However, a flat stick or a round rod is
often used, in the absence of the commercial bar.

Let us describe to you a rug we saw recently, woven on a carpet warp foundation, in solid color -- white. This rug was set up 30" wide, with warp setting as above, with knots tied over double warp ends. It was woven to be 54" long and is used in front of a fireplace. No design, just long pile of heavy 12/4 cotton. (Another rug used "Blue-nose" heavy twine for warp, about 50¢ per pound, Park-Hanneson Co., Winnipeg, with the same warp setting as above except that the string was heavy enough to use single.) Twill threading, on a 4-harness loom.

1. Weave a tabby heading, beating up very hard. Use carpet warp double on the shuttle, or string single.

2. Knots do not begin right at the edge, -- about 4 edge ends are left and on these a tabby edge is built up to correspond to the depth of a row of finished knots. A shuttle is passed back and forth, using the same heading material in tabby weave, over these edge warp ends, and the shots beaten down with a small stick. This is done at both sides of the warp.

To begin the knots, place gauge bar just on top of tabby heading. Since a long shag was desired in the rug we mention, a stick 2" wide was used. The weft was a heavy 12/4 cotton, white.

From the left, count in 4 double warp ends (4 single ends if string is used for warp). Slip forefinger of left hand under the 5th warp ends. Have weft cut in about 2-yard lengths, and pull the length under this 5th end until about 1" is left on top. Use a Right to Left upward motion. Slide left forefinger under next or 6th warp ends and pass weft end
over 5 and 6 in a right to left motion, with the long end free on top. Using one motion, pass the long end from right to left under 6 and under the space bar, and pull back to tighten the knot. Then on to the next knot: Bring weft end forward over the bar, from right to left and upward under the lifted 7th warp end group, pass weft from left to right over 7th and 8th, under 8th and space bar from right to left and upward, tightening the knot by pulling backward at the end of the motion. Continue across the warp, leaving 4 warp end groups at the edge, for the tabby build-up.

A sharp scissors or razor blade will cut the loops, or they may be left uncut. ("Flossa" technique -- weft ends cut and at right angles to the warp, as pile; "Rya" technique -- uncut or cut weft ends, hanging long and parallel to the warp, with 2" or more of tabby between rows of knots.)

3. Two or three rows of tabby, well beaten, follow the row of knots. Build up one edge first, as mentioned in (2) above, then one complete tabby row, then build up the other edge, and then finish the complete tabby rows. The longer the pile, the more tabby rows between knot rows.

The woven rug may be finished by a knotted fringe, or hemmed down all around -- the latter seems preferable.

The rug we mention is white, and is in perfect
condition after 8 months of use. It is cleaned by shaking, and "dunking" in soft snow, in winter.

6. When is the Soumak technique used?

The Soumak belongs to the Kurds, a combination of Caucasian and Persian classes. A long end is used and no pile is cut. It is usually a fine weight rug, as used in the Orientals, and on close examination looks like plaiting. Last week we saw an old Egyptian piece from a camel's trappings -- Soumak stitch was used in it. The Scandinavians use the process in such a way that it appears to be like a twill. This is obtained by the way lines of weft are manipulated.

Weave a 1" or 2" heading, as usual, beating it up well. Again leave 4 ends to build up each edge. The beginning and ending weft ends are left hanging down under the warp and are laid-in in the next tabby shed. Weft goes over 1 warp end (or pair if warp is double), and back under the same warp end in a right to left direction. Then, over the next warp end and back under it from right to left. The color may be changed at any time -- see note on ends above.

The first row progresses in a general left to right direction, then one or two rows of tabby, using the warp material, then the second row of pattern weft begins at the right and progresses to the left, with the weft passing over the 5th warp end and back under it from left to right, and so on for each stitch. This gives the plaited effect. The tabby and weft must both be well beaten down, resulting in a very firm, smooth-surfaced rug.

The Scandinavian technique uses the weft progressing
in the same direction each time, as shown in the first line in the sketch above, giving the "twill" effect.

7. What are the general classifications of Oriental rugs, according to district?

We give you a chart, compiled with the help of Compton's Encyclopedia, -- to round out the weaver's general knowledge of handwoven Oriental rugs. (next page)

----------

We hope this bulletin will be of help in directing the weaver to the type of rug most suited to the individual case, and will give as well some sources of additional information. We will plan another rug bulletin for early next year.

----------

Good Weaving!

Ethel Henderson
Mrs. E. M. Henderson
20 Ritz Apartments
Winnipeg, Manitoba

Mary Sandin
Mrs. R. B. Sandin
University of Alberta
Edmonton, Alberta

Per year $3.00
Sample copy .35
Copyright 1946
### Classification of Oriental Rugs

<table>
<thead>
<tr>
<th>Geographical Classification</th>
<th>Sub-Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persian</td>
<td>Khorassan, Meshed, Herati, Shiraz, Kirman, Tabriz, Sehna, Serebend, Teraghan, Saruk, Heriz, Hamadan, Sultanabad, Isphahan</td>
<td>Characteristic design is floral pattern.</td>
</tr>
<tr>
<td>Turkish</td>
<td>Ghiordes, Kulah, Borgamo, Ladik, Yuruk, Melez, Kir-Shehîr, Turkish Kelim</td>
<td>Geometric or highly conventionalized flower and animal designs</td>
</tr>
<tr>
<td>Caucasian</td>
<td>Daghestan, Cabistan, Chichi, Circassian, Derbend, Kazak, Guenjes, Cashmore, Shirvan, Karabagh.</td>
<td>Geometric designs carried to perfection, -- stars, triangles, circles, fretwork, diamonds and various Svastika forms.</td>
</tr>
<tr>
<td>Kurds - combination of Persia and Caucasus</td>
<td>Persian Kurdistan, Turkish Kurdistan, Sumak, Mousul and Kelim</td>
<td></td>
</tr>
<tr>
<td>Turkoman (Russian Turkestan)</td>
<td>Bokhara or Tekke, Khiva or Afghan, Yomud, Baluchistan</td>
<td>Bokheran rugs have straight line pattern and rich and harmonious colors</td>
</tr>
<tr>
<td>Indian</td>
<td>Silk rugs from Tanjore, Masulipatam, and Benares</td>
<td>Closely woven; usually large centre medallion. Designs directed by European and American firms. Green, blue, crimson, and yellow most used.</td>
</tr>
<tr>
<td>Chinese</td>
<td></td>
<td>Highly conventionalized designs on a solid field of wonderful shades of blue, yellow, red, fawn, gold, or tan.</td>
</tr>
</tbody>
</table>
WEAVING AT BANFF, 1946

This month's bulletin is on a variety of subjects, planned to give some of the weaving procedures at the Banff School of Fine Arts: July 17th to August 24th, 1946.

But first, a word of geographical interest about the students who attended our weaving session. We had representative from Norway, California, Michigan; from every one of the nine provinces of Canada except Prince Edward Island; and from as far north as the Peace River country. Our visitors were legion, from every state of the Union as well as from countless spots in Canada.

Each year it is interesting to watch the general direction which the weaving set-ups take. Last year, for instance, we had a great run on weaves suited to place pieces for table settings, -- everyone wanted "just one more" set. Another year the demand was for baby blankets, bath mats, etc. This year we resembled a miniature factory, with yard goods just rolling off the looms during the last two weeks of the course.

Coat and suit lengths, skirt and dress materials of various weights came off the looms. We will list for you the different items, together with the important details.

The first and most important detail to note is the stock from which we planned our yardages. We buy our yarns as they are available during the winter and spring. Priorities make it difficult to buy any great quantity at any one time, and
consequently dye lots had to be carefully checked when planning any given warp. Our supply sources were: Hobbycraft Studio, 29 Gorge Road, Victoria, B.C.; Lewis Craft Supplies Ltd., 8 Bathurst St., Toronto, Ontario; and the Searle Grain Co., Winnipeg, Manitoba. From the first two we obtained 16/2 "Weavercraft" yarn; from the Searle Grain Co. we obtained more of the same, plus the following: 32/2 worsted (very fine) in white, azure blue, scarlet, dark green, yellow and white; 3-ply white English botany, in the grease (i.e. the natural sheep oil had not been washed out); dark brown English cheviot homespun, and rusty brown Harris tweed. These last were a special shipment from Scotland, and more is hoped to be on the way soon. All of these yarns make excellent warp, and our weavers wove several lengths without a broken warp end.

It was most interesting to plan the different combinations, and to work out with the student a suitable weave, warp setting, color arrangement, etc., then to consider the preliminary sample and suggest any necessary changes, before final plans were decided upon for the woven piece.

When starting to plan any yardage, the student had to consider the weight desired, the pattern, and color. We explained suitable weaves, and left the final choice to the weaver. We advised a tentative warp setting, and on the basis of all this, a trial warp was made, one yard long and usually about 60 ends wide. The pattern was threaded-in and the sample woven. The number of weft shots per inch was considered against the warp setting to obtain our aim -- an almost equal mesh. Too close a setting means a warp-face, and too wide a setting a weft-face material. The student then considered whether the sample was satisfactory.
If too thin, it was re-sleyed closer; if too heavy it was re-sleyed farther apart. A hard beat and a soft beat were tried. When, by this trial and error method we arrived at a conclusion, the sample was taken off the loom, measured across warp ends and weft shots, washed in mild soap suds (one of our experienced weavers advises a teaspoonful of ammonia added to the soapy water), and then steam pressed.

The final cloth was then considered. Did the weave and yarn wash satisfactorily? Would it be what was required for the purpose? All being well, we proceeded with our information all in hand.

One important point had yet to be considered: the width of the warp and the length to be woven. If the garment was to be tailored, we planned to have 27" plus shrinkage allowance; if to be sent to a dressmaker, 36" plus shrinkage allowance (36" less shrinkage will do, if our loom is only 36" wide). For a lady's suit, we warped 7 1/2 yards; 12 yards for a man's suit with two pair of trousers. On Weavcraft we allow about 3" per yard shrinkage in length, and about 2" in width; for botany, Harris, etc., about 6" to 8" per yard in length and 4" in width. One must never forget, too, the 27" to be allowed for loom waste. A kilted skirt takes about 4-3/4 yards inclusive (i.e. length of warp, which allowed for waste and shrinkage), and a skirt with a kick pleat about 3 yards inclusive. One is always wise to consult with a tailor or dressmaker with the woven sample, as tailors especially are particular as to the goods they will use.

Here, then, follow some of our set-ups at Banff:

**No. 1.** A Stewart Dress Tartan, 8 yards long, from Weavcraft 16/2 yarn, the sett taken from "The Clans and Tartans of Scotland", ...
Robert Bain, Collins, N.Y., -- 30 ends per inch, 28 weft shots per inch, 36" wide on the loom.

No. 2. A man's suit length, 12 yards long, beige Weavcraft 16/2 warp, 31" wide at 40 ends per inch; the draft, a broken twill adapted from Marguerite Davison's "A Handweaver's Pattern Book", #402, p. 25; weft 16/2 in chocolate brown, woven with 20 double weft shots per inch (wound double on the shuttle).

No. 3. A lady's suit length, 8 yards, azure blue Weavcraft 16/2 in a 6-thread Dornik twill; 36" wide, 30 ends per inch, 28 weft shots per inch.

No. 4. Coat length, Hound's Tooth, 8 yards long; warp of white 3-ply English botany, still in the grease, and brown 16/2 (4 ends white and 4 ends brown); 30 ends per inch. Weft, 1 shot dark green, 2 shots brown, 1 shot dark green, 4 shots white, etc.; 28 shots per inch. This is a beautifully soft piece of goods.

No. 5. Plaid skirt length, 4-3/4 yards for a kilted skirt, in 32/2 Weavcraft in white, azure blue, yellow, and scarlet, 40 ends per inch. This was an original plaid by Miss Betty Dickson of Toronto, planned so that in the pleating around the hips only the blue section of the plaid would show, and the white plus blue would show in the pleats below the hips. Her arrangement: 20 ends white, 4 ends scarlet, 20 ends white, 4 ends yellow, 20 ends white, 4 ends scarlet, 20 white, 17 blue, 5 white, 8 blue, 4 yellow, 8 blue, 5 white, 17 blue; woven in the same order with 40 weft shots per inch.

There is simply no resemblance between the 16/2 yarn at 40 ends per inch and the 32/2 yarn at the same setting. One is a firm and sturdy suiting, the other is like the finest French flannel, as this last yarn (32/2) is extremely fine.
So much for our experiments with yarns; all, thanks to careful planning, excellent pieces when finished.

This year we bought also, from the Searle Grain Co., who imported it from the United States, white cotton nubby boucle, of a good weight. We used the "Clyde Dunbar" crackle weave arrangement from Mary Atwater's "Recipe Book". The warp was 8/2's cotton, natural, at 24 ends per inch, for bath towels. The boucle was woven in tabby, and we used Lily Mills cottons (Art. 714 3 ply, and Art. 914 6-strand), bought from The Lewis Craft Supplies Co., for the pattern bands. These color-fast cottons, while very expensive by the time duty is paid, repay by their satisfying color, sheen, and color fastness.

We also used these Lily cottons for the students' first pieces, - the samplers, etc. These were enriched by the sheen and color choice, as compared with the eight colors we have been confined to using in 8/2 cotton during war years. One goes slightly mad in gazing on a shipment and seeing several values of one color to play with at the loom, and actually being able to work out a satisfying color harmony. We had 3 ply Art. 714, 6 strand filler Art. 914, and Tulip 4-strand Art. 1014. This last was used in bag or purse arrangements.

Lastly, our linens: We purchased three types, -- a #10 lea warp and a 30 lea Irish linen warp, both bleached, from the Searle Grain Co., Winnipeg. We also purchased 50/3 linen gilling twine from Park-Hannesson Co., 55 Arthur St., Winnipeg; and some heavy 3-cord bleached linen from the Handicraft & Weavers Supply Service, 5322 Snowdon Ave., Montreal 29, Quebec. (NOTE: we append sources in each case, since our readers do inquire).

The #10 lea was set at 20 ends per inch, using a Swedish lace arrangement from Kate Van Cleve, to be used for place pieces
and runners. This warp can be woven very successfully damp, after first being dressed. Dressing was done by soaking the warp chain in a boiled (and strained) linseed solution, then allowing it to drip dry. We discovered that a "Fly Tox" spray was the ideal way to dampen it, -- it should be damp, not soaking. The weft used was the same weight.

Both the Spanish Open Work and Bronson Leno were done on the same warp set-up (Mary Atwater's "Recipe Book", Series 5, No. 20, serviette arrangement) in pre-war apricot linen, at 24 ends per inch. This weaves successfully dry. The same material was used as weft.

We had a 20" towel warp set up, 45 ends per inch, from Park-Hannesson's unbleached 50/3 linen. This was woven dry, with a 30 lea bleached Irish linen for weft. The draft was from Marguerite Davison, -- Twill and Bow Knot. The color and texture were lovely, and no broken warp ends. We append a word of caution, however, in rolling linen. Special care must be taken with cards or sticks on the warp beam, and the tension must be watched meticulously.

We were fortunate in obtaining some unbleached 3 cord linen, almost as heavy as carpet warp. It looked as though it would make an interesting large, coarse, lace tea cloth, and it certainly did. We set it at 15 ends per inch, 45" wide, and used a combination of set. up #1 and #2 in the January 1945 LOOM MUSIC. We used the same linen for weft, and wove the cloths square. They washed up beautifully soft, and the effect was most pleasing.

--------

Other looms were warped with the usual standard weaves.
We rolled about 40 warps in all, and a visitor going through the rooms saw: Rosepath, twills, rug knots, weft face, many overshots, a coverlet in 6-harness summer and winter, -- the Snowball and Pine Tree Border from "The Shuttle-Craft Book", bath mats, honeycomb, barleycorn, leno for scarves, Mexican double weave, Ceinture scarves, and many others.

One group we must mention specially in our jottings is the "inlays". These, from many original cartoons, were worked out in Dukagang, French embroidery, and "laid in the shed", to name some of the techniques.

Just to give you an idea of the amount of work accomplished by an average student who attended the full session, -- a beginner with no previous experience: 1 tabby runner 18" long with overshot or twill bands; 1 sampler of original treadling variations, 18" long; 1 "inlay" runner; 1 piece of overshot "as drawn in"; 4 place pieces in M's and O's linen; 4 place pieces with picked up inlays; 4½ yards Stewart Dress Tartan; and a card woven belt.

We are asked frequently how we charge students for the materials used. All our supplies are reckoned by weight. We figure cost per pound, plus shipping charges, and break that down to cost per ounce. The student's work is weighed as it comes off the loom, and charged accordingly. Thus, an 18" cotton runner, 12½" wide, might be about twenty cents.

Our yardages ran in the neighborhood of not more than $2.00 per yard finished. The man's suiting at 40 ends per inch worked out to $1.80 per yard! All yardages are washed, without fail, as indeed all pieces from the looms, except shopping bags, etc.

It was a weaving gala! Good weaving, too, to you!

Mary Sandin  Ethel Henderson
WARP FACE Rugs and a WEFT FACE Bag Adaptation

In so much of our weaving we plan to weave to the 50-50 formula, having our weft shots and warp ends square each other. Therefore, the occasional departure from this type makes a welcome change and a restful break in our Looming.

In order to remember correctly the names of these two types which are alternatives to the 50-50 weave, we call in "opposites" to help us. Thus, a weave in which the surface is formed by the warp is called a "Warp Faced Weft Rep", and the one where the surface is formed by the weft is a "Weft Faced Warp Rep." A rep is a firm ribbed fabric. The weft face has the rib running the length of the web, while the warp face has the rib running across the web.

The warp used in all three of these weaves may be the same, but the warp setting is determined by the particular type of weave we wish to obtain. For example, if our 50-50 weave is produced with a setting of 30 ends per inch, the warp face setting might be 60 ends per inch, while the weft face setting might be 15 ends. However, the predetermined use of the article also influences the warp material, -- whether it is to be tapestry, rug, upholstery tape, or a firm upholstery material.

The weft material is determined by the same circumstance, -- the use of the finished article. It is possible to use cotton, wool, or silk in any given instance. Linen may be used in the
weft face type where a strong warp is desired, but, generally speaking, linen should be used in a 50-50 weave.

Where do we look for examples of these rep weaves? Some examples which come to mind are the Navajo blankets; Peruvian, Guatemalan and Javanese weavings; Roman stripes; as well as the beautiful tapestries, the homespun cushions, and the "bound type" weaving of the Scandinavians.

Warp Face Rugs

Two rugs of the warp face weft rep type have been waiting to be written up, and the age of these rugs testifies to their long use and sturdiness.

Many people object to rag rugs because of their "farmhouse" appearance, and to the lack of well planned color found in the hit-and-miss variety, but anyone seeing the pieces of Quebec Catalogue which we described some time ago could not lay the latter charge against them. While a rag filler of a neutral color is used in the particular warp face rugs we describe herein, it does not show. The weight of the rugs is quite good, and one advantage of these rugs is that they can be seamed very successfully to make a wide rug.

The weaving is interesting because of the considerable opportunity for color arrangements, and because of the fact that by using finer warp and filler one may plan upholstery or bags, etc.

The weave is plain, or tabby, so on our 4-harness loom we use a basic twill threading \( \frac{3}{4} \frac{4}{4} \frac{3}{1} \frac{2}{1} \), and treadle the tabby combinations (harnesses 1&3 and 2&4 alternately). In planning the rug, where we want lengthwise stripes of solid color, we draw in so many ends without a color change, but by alternating colors we get a broken or a modernistic "toothy" effect, thus \( \frac{5}{5} \).

Rug No. 1. The first example was woven at Lachute,
Quebec, about 1871, by Mrs. Walker, a Scotswoman, and was loaned to us by the courtesy of Mrs. Grace Raitt of Edmonton. The warp is a 2-ply homespun, - home dyed and spun, - about the weight of a 4-ply knitting yarn. The dyes are still handsome, after all this time. Our "piece" is in perfect condition although used for 30 years, perhaps because it was on the floor in the "parlor". The warp is set at 24 ends per inch (3 ends per dent in an 8-dent reed), in the following order:

48 ends Turkey red
36 ends of dark threads alternating with light, of brown, red, soft green: 1 brown, 1 green, 1 red, 1 green, etc.
72 ends arranged: 2 ends black, 1 red, 1 yellow gold, 2 black, 1 red, 1 green, 1 green gold, etc.
36 ends of soft greyed green gold
12 ends of brown and yellow gold alternately
2 ends of brown
24 ends of yellow gold and brown alternately
2 ends of yellow gold
2 ends of brown
4 ends of yellow gold and brown alternately
8 ends of brown and yellow gold alternately (red is desired
36 ends of Turkey red (or, blue green would fit in here if less
66 ends of greyed green gold
36 ends of greyed lilac
18 ends of yellow gold
18 ends of brown
12 ends of red
18 ends of greyed green gold
12 ends of yellow gold
24 ends of natural black
30 ends of Turkey red
30 ends of soft blue grey
12 ends of Turkey red
12 ends of natural black
2 ends of yellow gold
4 ends of yellow gold and black alternately
12 ends of yellow
72 ends of natural black

The above makes about a 27" width (on the loom), and while not balanced as to color arrangement, is a well planned group of stripes.

The weft is a dull beige cotton cloth, cut in about 1/2 to 3/4-inch widths, folded and pressed with the cut edges inside. The rug was woven with about 6 weft shots per inch.

Rug No. 2. The second example is also a very old piece,
from Lunenberg, Nova Scotia, loaned to us by the Canadian Handicrafts
Guild of Montreal. The Lunenberg district was first settled, we
are told, by Hanoverians of Dutch and/or German descent. This
weaving is typical of much done long ago in that area. Again the
weft is neutral colored rags, and the warp is dyed homespun. An
almost exact replica of this homespun is the 2-ply sold by Wm.
Condon & Son, 65 Queen St., Charlottetown, P.E.I., at about $1.10
per pound, -- when quotas are available. It will be a joyful day
when all we need is the money to buy, -- let's hope we have that
money when materials are easy to obtain!

Our same twill threading draft \( \frac{3}{4} \frac{4}{4} \frac{1}{1} \frac{1}{1} \) was used, and
the same tabby treadlings. The warp setting is again 24 ends per
inch (3 per dent in an 8-dent reed). While the warp in both these
examples covers the weft, in using another yarn it might be neces-
sary to step up the setting to 30, or even more, ends per inch
in order to cover the weft thoroughly. Experimentation will
determine the warp setting for any given yarn.

This rug is woven 18" wide, and the toothed stripes alternate
with a plain stripe. The warp arrangement follows:

\[
\begin{align*}
(1) & \\
12 & \text{ends yellow gold} \\
10 & \text{ends yellow gold and black alternately} \\
10 & \text{ends black} \\
14 & \text{ends soft tangerine orange} \\
10 & \text{ends pearl grey} \\
6 & \text{ends red and grey alternately} \\
6 & \text{ends grey} \\
6 & \text{ends red and grey alternately} \\
6 & \text{ends red} \\
4 & \text{ends yellow gold} \\
8 & \text{ends red} \\
8 & \text{ends red and black alternately} \\
4 & \text{ends black} \\
\end{align*}
\]

Reverse to beginning, then continue from there
as follows:

(b) 144 ends natural brown or black (18" width to here)
Repeat (a) = 8" more, or 26" in all

(a) and (b) are alternated in this way, so that the plain
stripe is in the centre. In this way, joinings are through the
stripes, when it is planned to join several lengthwise strips together for a wide rug.

The Weft is like to that in the first rug, and woven 6 shots per inch. It weaves with a very smooth edge, making joining quite inconspicuous.

These arrangements also make excellent stair carpets, — one tries them in different color combinations to suit one's particular needs.

A weft Face Bag

The second rug inspired us to gain the same effect by using the "weft face" technique, for a solidly-woven, substantial-weight utility bag. We used the same color scheme as the Lunenberg rug, and obtained a very striking bag with the rug's bold colors.

For warp we used a beige carpet warp (or use string, or heavy linen, or 8/2 cotton double in the heddles), set at 10 ends per inch. The weft must pack down easily and cover the warp completely. We found a fine 3-ply yarn, or a 2/16 Weavecraft yarn doubled, to be excellent weft material. The front of the bag is in bold pattern stripes, the back mostly black. The width of the warp (14" wide) was used as the depth of the bag, so that our stripes ran across on the loom but up and down on the bag.

Use a twill threading \(2^3 4^3\) and a tabby treading: harnesses 1&3 and 2&4 alternately.

Note the difference in these techniques in the way color is used to obtain pattern stripes: in the rugs by warp arrangement, in the bag by weft treading.

The bag length was woven 25" long. We give the treadlings by inches, where convenient:

**Front of Bag** — use tabby or plain weave treadlings throughout

- 7/8" black
- 3/16" yellow

— continued p. 90
1/4" black and yellow alternate shots
3/16" black
1/4" orange
3/16" grey
3/8" scarlet
5/16" scarlet and grey alternate shots
1/4" grey
5/16" scarlet and grey alternate shots
3/8" scarlet
5/16" black
3/8" grey (tooth effect
1/4" yellow, ending with harnesses 2&4 to obtain special
3/16" black and yellow alternate shots
1/8" black, ending with harnesses 1&3
3/16" black and orange alternate shots
1/8" orange
3/8" black
1/16" yellow
5/16" scarlet, ending with harnesses 2&4
5/8" scarlet and black alternate shots
9/16" black, ending with harnesses 1&3
5/8" scarlet and black alternate shots
Repeat in reverse to ✶
1-5/8" black -- side fold of bag
Back of Bag (continue without any break between the weaving of the front and back of the bag)

✶ ✶ ✶ ✶
3/16" yellow
3/8" black
2 shots orange
3/8" black
2 shots red
3/8" black
2 shots yellow
3/8" black

✶✶
2 shots red
6-3/4" black -- centre of bag
Repeat from ✶✶ to ✶✶, in reverse
7/8" black

Finishing the Bag: The bag was seamed up the one side, with the 1-5/8" black stripe forming the fold on the opposite side. To make sure that this black stripe comes exactly on the fold, it is well to measure the front of the bag on the loom, then weave the back to that exact width. Any necessary adjustments can be made by increasing or decreasing the width of the black centre.

The bag was lined with unbleached handwoven linen, and fitted with handles made by twisting together a number of strands of 4-ply black wool.

Upholstery. - This is a sturdy material for dining room chair seats, done in one color or with softly colored stripes. Or,
use either of the first two examples for upholstering maple
furniture, or for cabin or shooting lodge chair seats. It is
effective, substantial, and colorful.

Good weaving!

[Signatures]

Mrs. E. M. Henderson
20 Hitz Apartments
Winnipeg, Manitoba

Mrs. R. B. Sandin
University of Alberta
Edmonton, Alberta

NOTICE TO SUBSCRIBERS

We are enclosing our subscription renewal forms this
month for two reasons: 1. So that you may send in your own renewal
before your Christmas rush begins; and 2. So that you may order
gift subscriptions in plenty of time for us to send a gift notice
to the recipient.

We have many 1946 subscribers who wish to know about
previous issues. Those not in possession of the 1944 and 1945
volumes may purchase them at $3 each. They are truly worth while
and, one might almost say, a "must" for beginners.

Subscriptions and renewals should be sent to Mrs. R. B.
Sandin, University of Alberta, Edmonton, Alberta. ($3 per year)

A SOURCE OF WEAVING BOOKS

A new mail order service for weavers is being organized
by Mr. and Mrs. Veren of Chicago. They will soon have ready a
catalogue of books on weaving, which they hope will include
everything in print in the English language, besides some in
Swedish, which are just being imported. This will be followed
by comprehensive lists on other Arts and Crafts. Mrs. Veren
is herself a weaver, and started weaving at Hull House, in
Chicago, where she later taught. During the war she taught
weaving at one of the Veterans Hospitals, in the Occupational
Therapy Division. She also studied at the Institute of Design,
in Chicago. Mr. Veren has spent many years in the book field,
and their combined interests are the basis for this new venture.
Anyone wishing information on Swedish books mentioned, and who
would like to receive their list as soon as it is ready may write
to -- Craft and Hobby Book Service, 2024 Sedgwick Street,
Chicago 14, Illinois.

HUG "WOOL": Following our September rug bulletin, the
Searle Grain Co., Winnipeg, write that they have a good stock of
rug wool in nine colors. ($2.10 per pound plus postage).
LOOM
MUSIC

VOLUME III NUMBER 12
DECEMBER, 1946

Mary
Sandin
Edmonton

Ethel
Henderson
Winnipeg
THANKS

Three circumstances inspired this blanket bulletin: a visit to a blanket mill, the possession of several pounds of white homespun, and requests from subscribers for information on blankets.

The visit to the mill was interesting indeed, with the process observed from the raw wool to the finished product. Although this mill is fully mechanized, the basic processes are the same as carried out by handweavers, and therefore of considerable interest to us. Many odd bits of information, not hitherto found in books, came to our ears. One of particular interest was that the weight of the finished yarn is determined in the very first process, the carding process.

One is always at a loss to know on what basis to judge homespun yarns, sight unseen. The only guides seem to be 1-ply, 2-ply, fine, etc., and no two spinning mills, purposely we are told, use the same system of counting weight. We found that the system in use at this mill was by grains, - 40 grain, 80 grain, 90 grain. Interpreted, this means that a 40 grain yarn is one so spun that 20 yards, the standard of weight throughout, weighs 40 grains. The 80 grain means that 20 yards weigh 80 grains. Thus, an 80 grain homespun is twice as coarse as a 40 grain one.

The raw wool is fed into the carders, which consist of a series of cylinders arranged in a continuous line. They are long cylinders carrying a surface of small wires set in at an angle, to comb the staples of yarn as they pass through the series. In homespuns the fibres are not combed so much as to lay the staples all in
one direction, as is done with worsted yarns.

The raw wool passes through carders 1 and 2 and comes out at the point X in a long soft roll about 4" thick, looking like a fluffy snake. It is then fed through carders 3 and 4 and emerges about the size of this circle in a continuous rope. During the last carding process the yarn looks, to quote a worker, "like a ghost", it is combed to so transparent a state. The yarn is separated into 8 or 10 ropes and wound around the cylinder at 5. This cylinder, when full, is moved to the spinning mule.

A long room, about 100 ft., is the spinning room. The cylinder of carded wool is placed in position on a long 50 ft. frame, alongside many other cylinders like it. About 4 ft. in front of these cylinders is another frame holding the spindles or bobbins. These spindles are on a frame which moves forward on a carriage in rhythmic order. An end of the carded wool is brought to each spindle. The machinery is put in operation, the spindles turn, putting the twist on the carded sliver. Enough twist, - the carriage moves forward, the spindle turning at the same time to wind the twisted yarn onto the spindle. Returning, the yarn is caught on the little projection at the top of the spindle, and a new length of yarn is drawn out ready for twisting. One operator attends to many spindles. When the spindles are full, the rack is lifted out and a new rack inserted.

The next step is winding the warp on a cylinder ready for the final warping. The spindles or bobbins are placed in a frame
and the ends carried up, over and down to the cylinder. The operator stands in the middle of this cage-like affair, stops the rolling whenever an end breaks, and mends it. About 200 ends are wound onto this cylinder, each end several hundred yards long. The cylinders are then moved to a set of holders, where the ends are threaded through a reed to space them. Four or five cylinders are warped at one time, each with a heavy board on top of it with a weight to maintain tension. We saw a board 2" thick worn like this from the winding of the warp.

When wound, the large beam is tight as can be, and will have about 1080 ends for a 15-end per inch blanket, and the yarn will weigh close to 1,000 pounds.

Next the ends are tied to the old threading on the warp beam, where long enough ends have been left for this. Heddle frames are lifted from the loom with the old beam, and placed back when tying is completed.

When the loom is finally in operation, the blankets are woven by the number of "picks" or throws of the shuttle. A 1080 end blanket is woven 1350 picks long, to allow for shrinkage.

Another day's visit, - another building, - we pick up the woven blanket for its most important treatment, the Finishing Process. The blanket length, 20 blankets long, is sewn together to make a continuous length. It is put into a box-like machine with rollers inside, and moistened with a thick soap mixture (with a little soda and oil added.) The rollers lift and turn and manipulate the soap-saturated blanket length for one hour. This shrinks the blanket or "fulls" it, from 72" to 63" width, and from 30" to 80" length.
The blanket is next washed (no soap is added as there is plenty in it) for 15 minutes. The rinsing takes 15 minutes also. Then the blanket is dried on a mechanical drying machine which presses as well as dries it. The last finishing, - a roller somewhat like the first carder, pulls up the nap on each side in turn as the blanket is fed through. After this the blanket is cut into lengths and the ends finished.

----------

NOW, WHAT IS THERE TO LEARN FROM THIS VISIT? We set up our loom after deciding our warp setting: a medium weight homespun at 15 ends per inch, a fine weight at about 20 to 24 ends per inch. We allow ourselves an adequate amount of width for shrinkage, and weave to a 50-50 mesh. Some blankets we see woven in tabby, some in a broken twill, a few in a straight twill. This straight twill, which was much used in the past, has been discarded, they tell us, because blankets of today do not need the thickness of a twill. Whichever one we threadle, the threading draft will usually be a twill: $\frac{3}{4} 1^{3} \frac{4}{1}$

We weave our length, and again allow for shrinkage. Taking our woven length, we saturate it with a thick soapy mixture and soak it in a minimum of lukewarm water for about an hour. Every 15 minutes we lifted and squeezed and stretched the blanket. We found that this soaking and stretching, plus a good lengthwise and crosswise pulling at the very last after squeezing out the surplus soap and shaking the blanket, shrunk the web sufficiently. Then it was washed in warm, not hot, water for 15 minutes, with frequent stirrings. We did not use a washing machine. If we had a very large blanket we might do as the old Scottish people did, - tramp it with our feet! The blanket was well rinsed in several waters and hung up to dry, with frequent shakings.
pressed it under a wet cloth with a hot iron, and only one thing remained, - to brush it up. This was quite a task, by hand, but determination plus about an hour's work did the trick. In a large departmental store's hardware department, we found a small brush for furs. It consisted of very fine wires set into a rubber band, the whole on a small wooden handle. By holding the blanket firmly we brushed up a nap on each side. Our blanket, by the way, was a crib blanket, 42" x 58" on the loom, finished 36" x 50", - regulation size.

The teasel is the time-honored device for raising the nap on woolens. For a source of these teasels, we are indebted to the efforts of Miss Mary E. Black, Director of Handcrafts and Home Industries, Halifax, N.S., and quote the following from the October 1946 issue of HANDCRAFTS: ".... The price is $1.25 per lb. (teasels are very light). A U.S. money order, including postage, must be forwarded with the order. The address is - John McLaughlin Grower & Dealer in American Teasels, Skaneateles, New York."

If you are not already familiar with the publication HANDCRAFTS, it is well worth writing Miss Black about it.

Some blankets are dyed in the wool, i.e., before carding; others after weaving. We prefer to dye our yarn in the skeins, as it is easier for us to handle it at this state. The plaid robes given below will appeal to the home dye enthusiast.

Motor robes and the Scotch blankets are set up as plaids or tartans (see LOOM MUSIC, October 1946), woven in the same way and finished as outlined above. Here are the warp arrangements for three lovely robes from Sweden, shown in Mary Block's DER STORA VAVBÖKEN (Albert Bonnier Publishing House, 665 Lexington Ave., N.Y.)

<table>
<thead>
<tr>
<th>#1 Robe, in browns and gold:</th>
</tr>
</thead>
<tbody>
<tr>
<td>72 ends brown</td>
</tr>
<tr>
<td>✶ 12 ends beige</td>
</tr>
<tr>
<td>6 ends brown</td>
</tr>
</tbody>
</table>
6 ends gold
6 ends brown
6 ends gold
6 ends brown
6 ends gold
6 ends brown
6 ends gold
6 ends brown
12 ends beige
64 ends brown

Reverse to \( x \), including the 12 beige, for one pattern repeat of 220 ends.
Repeat this once more, ending with 72 ends brown.
(For a slightly different width, increase or decrease the 72 end edge of brown).

**#2 Robe, in soft blues:**

\[
\begin{align*}
88 & \text{ ends soft lilac blue} \\
6 & \text{ ends white} \\
100 & \text{ ends darker blue} \\
6 & \text{ ends white} \\
580 & \text{ ends soft lilac blue} \\
6 & \text{ ends white} \\
100 & \text{ ends darker blue} \\
6 & \text{ ends white} \\
88 & \text{ ends soft lilac blue} \\
380 & \text{ ends -- for most of our looms this would need to be set up in the semi-circular technique -- see below.}
\end{align*}
\]

**#3 Robe, in soft greens, with a little rust and white**

\[
\begin{align*}
26 & \text{ ends dark green} \\
4 & \text{ ends white} \\
10 & \text{ ends dark green} \\
6 & \text{ ends light green} \\
12 & \text{ ends dark green} \\
8 & \text{ ends light green} \\
6 & \text{ ends dark green} \\
6 & \text{ ends light green} \\
6 & \text{ ends dark green} \\
6 & \text{ ends light green} \\
120 & \text{ ends dark green - centre} \\
6 & \text{ ends light green} \\
8 & \text{ ends dark green} \\
4 & \text{ ends white} \\
36 & \text{ ends dark green} \\
6 & \text{ ends rust} \\
32 & \text{ ends dark green}
\end{align*}
\]

Reverse to beginning, starting with the 4 ends white = 936 ends, which again will require the semi-circular technique.

Perhaps, though, we desire to weave a two color blanket, one color to each side. This is done by using a 3 and 1 twill: harnesses against 1 harness, alternated with a 1 and 3 twill: harness against 3.

The basic twill threading is used: \[
\begin{array}{cc}
\text{1} & \text{2} \\
\text{3} & \text{4}
\end{array}
\]

Use a direct tie-up and make our treading combinations by using
three treadles together when needed, since few of our 4-harness
looms have the eight treadles which would be necessary for the
regulation tie-up.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct tie-up</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>1:2</td>
<td>3:4</td>
</tr>
</tbody>
</table>

for sinking or
rising shed loom
tabby

Treading:

1st shot - with Color A - Treadles 2,3,4 together
2nd shot - with Color B - Treadle 2
3rd shot - with Color A - Treadles 1,2,4 together
4th shot - with color B - treadle 1
5th shot - with Color A - Treadles 1,2,3 together
6th shot - with Color B - Treadle 3
7th shot - with Color A - Treadles 1,3,4 together
8th shot - with Color B - Treadle 4
and repeat

(From: I Vavstolen, II, Mattsson and Osvald, Albert Bonnier
Publishing House, New York City).

---------

We must not forget to remind you that a double width
blanket in tabby can be woven on your 4-harness looms. Our same
twill threading draft is used, with a special tie-up for the purpose.
In weaving, great care must be taken to make neat turns at the
joined edge, so that no looseness or tightness appears in the
centre when the blanket is unfolded. The warp setting is doubled,
so that the finished web is still 15 ends per inch. The theory of
this weave is that the warp is treated as two separate layers of
tabby weave, and two weft shots are woven through each web
alternately.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Semi-Circular</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>x</td>
<td>Tie-Up</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>1:2</td>
<td>3:4</td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

counterbalanced loom     rising shed loom

Treading: Treadle 1,2,3,4 and repeat

Very often in plain blankets, bands of color are
inserted at each end.
To finish, machine ends with a long stitch, then turn
over a hem and overcast it by hand, or blanket stitch the ends, or
bind with satin binding, or fringe in the case of a robe.

The Jubilee Guilds of Newfoundland and Labrador suggest
this method for making fringe on motor rugs: Leave 12" between
blankets for fringe. While on the loom, twist 6 warp ends together
and fasten by putting a heavy thread through the middle of the twist
Continue across the warp ends, using the same heavy thread across to
hold the twists. Off the loom, dip these twists into hot water
before cutting blankets apart.

Oh! yes, since the edges of blankets are not bound or
hemmed, it means good edges as you weave. Some blankets are set
with double edge threads for about the first 10 or 12 ends, for
extra strength.

One last gleaning from the mill visit, - a 72" x 90"
blanket should weigh 4 pounds when finished; a 63" x 82" blanket
3 pounds. This is standard weight.

In the mill, no dressing is used on the warp, and none
should be needed at this warp setting if a good warp is used. We
used a medium 1-ply and it wove beautifully. The price per pound
is usually around $1 to $1.25 or more for these white homespuns.

(Some addresses are: P. McAusland & Son, Bloomfield, Prince Edward
Island, for 1-ply single and 2-ply fine; Fairfield & Sons, Winnipeg,
for coarse 2-ply; Searle Grain Co., Winnipeg, Man., for medium single
and 2-ply; Wm. Condon & Sons, 65 Queen St., Charlottetown, P.E.I.,
for 1-ply single and 2-ply).

The white homespuns, after washing of course, should dye
very satisfactorily for your plaid blankets.

Good Weaving, and the Season's Greetings, from

Mary Sandin and Ethel Henderson

1946 subscriptions expire with this issue.
Renewals ($3) to Mrs. R. B. Sandin, University of Alberta, Edmonton.
A-C-D—November
B—Blanket December
E—Bronson Tea Cloth
F—Soumak Rug Technique
Miss Winnifred Savage, Seaforth, Ont.

G—Yardage—Hound’s Tooth
Miss Elisa Neal, Caro, Michigan
Dornik Twill
Miss Marion Gowans, Toronto, Ont.
H—Head Shawls
Mrs. Donald Munroe, Winnipeg
<table>
<thead>
<tr>
<th>Title</th>
<th>Volume</th>
<th>Number</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jig, Monk's Belt</td>
<td>III</td>
<td>8</td>
<td>61-67</td>
</tr>
<tr>
<td>Bag, Twill</td>
<td>III</td>
<td>6</td>
<td>49-52</td>
</tr>
<tr>
<td>Bag, Weft Face</td>
<td>III</td>
<td>11</td>
<td>85-91</td>
</tr>
<tr>
<td>Banff, 1946</td>
<td>III</td>
<td>10</td>
<td>78-84</td>
</tr>
<tr>
<td>Barley Corn Weave for Towels and for Lace</td>
<td>III</td>
<td>4</td>
<td>27-35</td>
</tr>
<tr>
<td>Blankets and Robes</td>
<td>III</td>
<td>12</td>
<td>92-99</td>
</tr>
<tr>
<td>Book source - Craft &amp; Hobby Book Service</td>
<td>III</td>
<td>11</td>
<td>91</td>
</tr>
<tr>
<td>Bronson Weave Tea Cloth</td>
<td>III</td>
<td>7</td>
<td>54-60</td>
</tr>
<tr>
<td>Head Squares and Bags, Monk's Belt</td>
<td>III</td>
<td>8</td>
<td>61-67</td>
</tr>
<tr>
<td>Loom Check-up</td>
<td>III</td>
<td>2</td>
<td>16-18</td>
</tr>
<tr>
<td>Monk's Belt for Head Squares and Bags</td>
<td>III</td>
<td>8</td>
<td>61-67</td>
</tr>
<tr>
<td>Name Formula Drafts for personalized gifts</td>
<td>III</td>
<td>6</td>
<td>43-48</td>
</tr>
<tr>
<td>Photograph, January to June weaving</td>
<td>III</td>
<td>6</td>
<td>53</td>
</tr>
<tr>
<td>Photograph, July to December weaving</td>
<td>III</td>
<td>12</td>
<td>100</td>
</tr>
<tr>
<td>Robes and Blankets</td>
<td>III</td>
<td>12</td>
<td>92-99</td>
</tr>
<tr>
<td>Rug Techniques</td>
<td>III</td>
<td>9</td>
<td>68-76</td>
</tr>
<tr>
<td>Rugs, Warp Face</td>
<td>III</td>
<td>11</td>
<td>85-91</td>
</tr>
<tr>
<td>Suitings, Handwoven</td>
<td>III</td>
<td>2</td>
<td>9-15</td>
</tr>
<tr>
<td>III</td>
<td></td>
<td>10</td>
<td>78-84</td>
</tr>
<tr>
<td>Table Square in Cotton and Linen</td>
<td>III</td>
<td>1</td>
<td>1-8</td>
</tr>
<tr>
<td>Tea Cloth in Bronson Weave</td>
<td>III</td>
<td>7</td>
<td>54-60</td>
</tr>
<tr>
<td>Towels, Barley Corn Weave (Ukranian)</td>
<td>III</td>
<td>4</td>
<td>27-35</td>
</tr>
<tr>
<td>Twill Bags</td>
<td>III</td>
<td>6</td>
<td>49-52</td>
</tr>
<tr>
<td>Twill Christmas Gifts</td>
<td>III</td>
<td>5</td>
<td>36-42</td>
</tr>
<tr>
<td>Weaving at Banff, 1946</td>
<td>III</td>
<td>10</td>
<td>78-84</td>
</tr>
<tr>
<td>Weaving equipment, file of</td>
<td>III</td>
<td>3</td>
<td>24-26</td>
</tr>
<tr>
<td>Weft Face Bag</td>
<td>III</td>
<td>11</td>
<td>85-91</td>
</tr>
<tr>
<td>Whig Rose, Miniature, with border arrangement</td>
<td>III</td>
<td>3</td>
<td>19-23</td>
</tr>
</tbody>
</table>