Shuttle Craft Guild HANDWEAVER'S BULLETIN

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The Shuttle Craft Guild Handweaver's BULLETIN is published monthly by Mr and Mrs Martin Tidball (Harriet Douglas Tidball), The Shuttle Craft Guild, Keiseyville, California, and mailed to all members of the Shuttle Craft Guild around the world. Annual membership, \$7.50, PORTFOLIO edition \$17.50.

Our Guild-member contribution this month exemplifies a spirit which is one of the fine characteristics of handweavers in general, and one of the reasons why we find pleasures in handweaving far beyond the designing and weaving of textiles. It is the sharing of ideas and experiences. When a noted professional teacher, who has been so long in the hand-weaving field that most of us must seem like upstarts, voluntarily sends technical information just because she has found satisfaction in using a yarn and wishes to share her pleasures, a generosity shines through which is even more important than the information.

WORSTED YARNS

The wool fiber is probably used more by hand-weavers than any other natural or man-made fiber (with the possible exception of cotton) and is certainly less understood. Although if handled with firm respect and understanding, the wool warp presents no more problems than any other type, the wool warp is approached by most beginners with timidity because information about wool weaving is scanty.

There are two basic types of wool yarn: woolen and worsted, woolen being the coarse, tweed type while most others are worsted. The differences between the two types, which are not mutually sympathetic, should be understood if the weaver is to use either one well. Many handweavers have been poorly taught to start wool weaving with a "neither fish nor fowl" fabric of a worsted warp with a tweed weft. This is a concession to two factors: the appeal of the tweed along with the feeling of the beginner that it will be easier to weave a coarse tweed as a first project, and the knowledge of the teacher that a good, strong worsted yarn will make the safest, easiest, first wool warp. The concession should never be made as the two yarns differ widely; they should be finished in different ways, but more important, the elasticity and resiliance factors are so different that, except for a well lined, loose sport coat, the combined fabric will not tailor well nor hold its shape under continuous wear. The best advice to the beginner is the selection of the best, strongest, most reliable worsted yarn there is (which will probably be the most costly at the outset, though a cheaper yarn will. be more costly in the longrun) and use the same yarn in a perfectly balanced weave for both warp and weft.

Worsted yarn is a comparative new-comer to the textile field, the first known mention of the worsted process having been made in 1315. The name derives from the town in England where the system of spinning was first used -- Worsted, which was named by William

the Conquerer after the Battle of Hastings, because it was at this spot that he worsted King Alfred.

Worsted yarns utilize the longest wool fibers of the highest quality, and these fibers are processed many more times than woolen yarns. The characteristic process is the combing which takes place following the carding of the fleece, and from five to more than twenty different processes are employed to arrange the wool fibers in perfect parallel order instead of in the diorganized mass used for woolen yarns. The straightebing of the fibers, oiling them, drawing them out and combing them, and cleaning, make up the essential worsted system spinning, and create a yarn which is stronger, more lustrous, more elastic, smoother, finer, and much more expensive than woolen yarns.

There are two main types of worsted yarns, those spun by the English or Bradford system and those spun by the French system. Short fibers, $2\frac{1}{2}$ inches and under of the finest wool are used for the French system which is the most complex and costly of spinning systems and produces a soft yarn with high elasticity and versatility. Longer fibers which are consequently coarser and more lustrous are used for the English system.

Unfortunately the handweaver cannot judge the qualities and characteristics of any yarn by the simple standards of woolen and worsted, and English or French spun. Many other factors enter in, such as the origin of the sheep, the breed of sheep, the length and fineness of the staple, the number of processes within either the French or English system which the mill uses, the type of oil used in processing; and these are all technical matters which it is impossible for the consumer to judge. The handweaver must therefore depend upon experience with various types of yarn to indicate to him which kind is suitable for any specific fabric. For the in-

experienced weaver there are many surprises, some of them unhappy ones, in both the handleability of the yarn and the nature of the final textile. Therefore, in this field more than in any other, the handweaver seeks the guidance in selecting worsteds of a more experienced weaver. Were it possible to select wool yarns as one does cotton yarns, by ordering for instance, 2/18 English-spun worsted and knowing that the yarn from one manufacturer would be similar to that of any other, the matter would be simple. But manufacturers, who are in the habit of dealing with the knitting trade, seldom specify whether a yarn is English or French spun and not often do they even mention the yarn size, so the weaver gropes, with little information but trade names. The securing of complete information, which the cotton and linen manufacturers give as a matter of course, is a problem of consumer demand, and if enough handweavers demand the information often enough, the manufacturers will be cooperative in giving it. The job of the dealer is to sell yarn, and consequently he will meet the requirements of his trade. Manufacturers, as they come to understand handweavers' needs, are becoming more cooperative in making put-ups in desired forms, tubes instead of skeins or balls, and two or four ounces instead of pounds. As handweavers we can get what we demand if we are insistant and patient.

But knowing the size and spinning system of any yarn is not sufficient because characteristics and quality vary so widely. Therefore we use samples of the actual yarn to help determine what type of textile the yarn will produce. But a small sample is seldom adequate for indicating weavability and textile quality. It is often found that, for instance two 2/18s English spun worsteds, both to be woven in the same technique, must be used at different warp settings, or that handled identically, one will pull apart in the loom making the weaving a painful process, whereas another will weave without warp-end breakage; and these things can be learned only through using the yarns.

The handweaver needs to know the count number to be able to estimate the yarn requirements for any project. For worsted yarns the count humber is 560 yards, which means that one pound of size I yarn has 560 yards, or I pound of size IO yarn has IO X 560 or 5600 yards. Worsteds are used in doubled or plyed form which means that two or more strands are twisted together to strengthen the final yarn. writing count numbers for worsted yarns, the ply figure is always given first, the size second; for instance, 2/15s means two strands of size 15 yarn; since size 15 has 8400 yards per pound, two strands twisted together will have half as many yards, or 4200. Since the elasticity of wool is greater than that of any other fiber, and yardages are measured under tension, there is an actual, off-tension yardage considerably under the calculated figure, and as the yarn is measured in single strand, the amount of twist placed in the yarn reduces the length. Therefore yardage requirement estimates must be made generously.

Here are some guides to use in determining the specific characteristic qualities of worsted yarns. The length of the staple imparts the most important character as the longer the staple, the coarser and more lustrous is the yarn, the more more tendency there is for the yarn to pull apart. However, the amount of twist placed in the yarn is important as the yarn becomes stronger with more twists per inch. However, long staple, highly twisted yarn is apt to be hairy and cause excessive friction between warp ends in weaving. On the other hand, the shorter the fiber, the easier it is to handle, the softer the fabric and the greater the, versatility. To help the handweaver select the type of worsted yarn suitable for his particular project, here are some facts about some of the most used and safest worsted handweaving yarns.

Willamette, from the Oregon Worsted Company, 8300 S E McLoughlin Blvd, Portland 2, Oregon, is available from the manufacturer and also from many local dealers, at a controlled retail price. The yarn is a 2/20 English spun worsted of combined imported and domestic wools, with 5600 yards per pound, and is put up on 5 inch long two-ounce tubes. It has more twists per inch than the average worsted, and less elasticity. The wool is long-staple, lustrous, which weaves easily at fairly wide warp settings, but there is considerable friction when the settings are dense, though breakage is not severe. The fabric is crisp and hard-surfaced and is splendid for men's suitings and for other clothing fabrics for which a soft drape is not required. Available in 38 excellent colors.

Clackamas is the 2/30 size of the yarn described above. Yardage is 8400 yards per pound. This yarn has good strength for its size, but it is impractical at close warp settings to give a very firm fabric because of the great friction which makes shedding difficult and warp ends fragile. The Oregon Worsted Company supplies sample cards at the token fee of \$1.00, which include many other types of worsteds, worsted novelties, baby yarns, worsted and metallics, synthetics and blends — some of the most attractive yarns available.

Tam O'Shanter (formerly Royal Society) is now distributed exclusively by Hughes Fawcett Inc, 115 Franklin Street, New York 13, N Y, and their many local agents throughout the country. This yarn is English spun of imported wool, 2/18 size with 5040 yards per pound. It is put up on 5 inch, 4 ounce tubes and sold at uniform prices. It is highly twisted, of medium elasticity and luster and staple length, is strong and reliable. It is a medium-versatile yarn and fabrics woven of it drape well.

Fabri from Emile Bernat and Sons Co is sold only through local agents and may not be ordered directly from Bernat. It is a 2/18s English spun worsted of highly selected imported wool with unusually fine, long fibers. It is put up in two ounce skeins or on 6 inch, two ounce tubes (at slightly higher price). The yardage is 5040 yards per pound and the yarn is treated for mothproofing. The luster is good and the yarn is remarkable for its uniformity, its high elasticity, its strength, and its versatility. The color range is outstanding as the Bernats are famous dyers. This is probably the most fool-proof of all worsted yarns and is the safest yarn for the beginner in wool weaving to use. It weaves to a smooth, soft, fine draping fabric. Permits greater variation in warp setting than most worsteds.

Afghan from Bernat is the 2/28 size which is identical in other respects to Fabri. It has 7840 yards per pound. May be used in very close warp settings, if desired, for firm, light-weight fabrics, or in wide settings for gauze-like materials.

Lily Weaving Wool (Art 110) is sold directly by Lily Mills Company, Handweaving Department, Shelby, N Car. It is a French spun worsted of 2/15 size with 4200 yards per pound, and comes in two ounce skeins. This is a strong, uniform yarn, easy to use, somewhat sticky with close warp settings. Because the fibers are so soft and fine, fabrics have a tendency to become fuzzy on the surface with heavy wear unless woven firmly. It is adaptable to a wide variety of uses.

FINISHING WORSTED FABRICS

In a very general way, the processing of worsted fabrics to secure the proper finished goods, is the same as the finishing used for woolens, except that the amount is reduced according to the number of processes to which the fibers are subjected during the spinning. Woolen fabrics require the long washing and felting process known as fulling, because the fibers are nearer to their natural state than worsted fibers which have been processed many more times. The yarns described above have all been sufficiently processed in advance that the maximum treatment they should be subjected to is a quick bath in mild, luke-warm suds, a rinse, a quick dry with mechanical extraction, and steam pressing.

The handweaver will find that best results are obtained from the Willamette and Clackamus yarns if the fabrics are simply submerged in cool water, without soap, then dried and steam pressed. A good way to dry at home is to lay wool blankets on the floor, stretch the extracted fabric warp-wise and weft-wise, lay it smoothly on the blankets, and then roll very tightly, allowing the roll to remain for about a day to transfer moisture from the thin cloth to the heavy blankets. The washing is required for shrinkage with these yarns and shrinkage averages about one inch in eight to ten, though this will vary with the warp setting and the weave employed. Close warp settings woven in tabby have less shrinkage than wide settings woven in twill. Some weavers feel that a similar treatment is desirable for fabrics woven of Tam O'Shanter, though there is difference of opinion and some use merely steam pressing. Shrinkage is slight for these fabrics and an average allowance of one inch for fifteen to eighteen is adequate. The Bernat Fabri and Afghan are yarns which have been so extensively processed that they require no processing other than steam pressing, although they are perfectly washable and will not be damaged or altered by washing, except for removal of the moth-proofing. Shrinkage is negligable and even after washing the fabrics are easily stretched and dried to their original loom width. The Lily Wool hould be simply steam pressed, as the yarn is so

soft that washing has a tendency to felt and nap the surface. For some types of fabric this felting may be desirable.

Only prefessional steam-pressing, which is the application of high-pressure steam through the material without the use of a hot iron, should be used on any worsted fabric. Never iron the fabrics with either a steam iron or a pressing cloth, though of course such processes must be used in the tailoring to press seams and pleats. The use of a hot iron has strong influence in breaking down the structure of the wool filaments, removing their resiliance and elasticity and giving the fabrics a tendency toward crushing and wrinkling, and sagging or becoming misshapen with wear.

USE of the WILLAMETTE WORSTED

The Oregon Worsted Company yarn should be used for suit or coat fabrics when a crisp texture is desired. It adapts best to simple tabby and twill weaves. For tabby, the yarn gives a characteristic crepe effect which is caused by its strong twist, since the same twist is used for both warp and weft. In mill-made fabrics this crepe, which takes the form of short diagonal texture lines, is eliminated if desired by using an S-twist yarn for warp and a Z-twist yarn for weft, or visa-versa. It is not economic to supply handweaving yarns in both twists, but the crepe effect is a pleasant texture which may be advantageously encouraged as giving a peculiarly "handwoven" effect.

The simple weaves with short floats are best for this yarn -- twill, tabby, and the fancy six and eight-harness twills. As is the case with other yarns, the tabby weave permits the lightest weight fabric with firm texture, as it can be woven on wider warp settings than twill. The two-thread float of the balanced four-harness twill gives a

softer, spongier fabric which drapes better. Longer floats in the multiple-harness fancy twills multiply the soft sponginess. The group of mono-colored crepe twills are not as effective in this yarn as with softer yarns because the twist of the yarn distorts the effects.

Selection of suitable warp setting for a yardage project must always be determined according to the type of fabric desired. Sampleing is the only way to determine this matter, but an analysis of the results of our own samples may save the weaver some time here.

At 20 ends per inch the friction on the reed is so slight that developing a beating rhythm to produce a perfectly even, balanced fabric is difficult. The beat is best made on a closed shed. The fabric is crisp but open, and has an excellent body. This setting is very good for full skirts of informal design and may be used with simple pattern weaves such as the Opposites, or Monk's Belt type, Overshot, or the type given in the July 1954 BULLETIN, for pattern borders. Since the fabric is quite transparent, color harmonies which do not give strong contrasts are better, to avoid the wrong-side floats showing through. This yarn is not recommended for scarves or stoles as the texture is apt to be irritating and also because the drape is not soft.

At 22½ ends per inch the fabric is somewhat firmer and is easier to weave with a regular, perfect balance. The crepe effect develops at this setting. The suggestions for use are the same as those given for 20 per inch, but the fabric is slightly stiffer and less transparent. Twill in both of these settings is too soft to be generally practical, and is almost impossibly difficult to weave smoothly.

- At 24 or 25 ends per inch the qualities of firmness and weaving ease increase. The tabby fabric shows strong crepe effect. The weight and quality are excellent for light-weight, tailored dress goods. A very pleasant, soft twill is woven at this setting which would be useful for light-weight sport clothes.
- At 30 ends per inch the tabby fabric is very firm, crisp and crease-resistant, excellent for a man's light-weight suit. The twill is firm and of good, light-weight sport quality. Some difficulty may occur in shedding, particularly in weaving tabby, as there is great friction between warp threads which gives a tendency toward warp breakage. Crepe effect disappears at this close setting.
- At 36 ends per inch a most excellent twill fabric of serge-like quality results. There will be some difficulty with shedding, and consequent warp breakage. The tabby fabric is too close and tight to be desirable. To facilitate shedding, it is wise to beat with a single stroke before changing the shed, and with a double stroke after changing the shed, to separate the threads. A sley of three per dent in a 12-dent reed sheds better than two per dent in an 18-dent reed.

DRESS FABRICS in WILLAMETTE

Three dress yardages were woven with this yarn and, as a decorative element was desired, the plain 100% wool boucle yarn from the Oregon Worsted Co was found to be an ideal combination yarn. This is sold under the trade-name Maypole, and comes in one-ounce pull-skeins of 110 yards each.

A Staggered Spot Fabric was woven on a warp set at 24 ends per inch and threaded according to the draft given in the BULLETIN for May 1954 for Polka

Dots. The weft was placed to balance, and the spots were woven of the wool boucle. Pleasant textile.

An Overplaid Fabric was woven on a warp setting of 24 ends per inch, threaded on two harnesses, alternated for tabby. A 12-dent reed was used. Thirty ends of the Willamette were threaded, followed by two of boucle, repeated throughout. The base warp was sleyed two per dent, but only one end of the boucle was drawn through a dent. The weft was woven to exactly balance the warp.

A Square with Dot fabric was a combination of the two weaves. A polka dot four threads wide was threaded a little to the right of each boucle stripe. The best threading arrangement for this would be: 1,2, alternated for 18 ends, 3,4,3,4, then 1,2 for 8 ends, and 2 boucle on 1,2. The spots would be made by raising harnesses 1-2 (or sinking 3-4) and throwing the pattern weft after three successive tabby shots. In practice, the four threads for the dot were threaded 3,4,5,6, and were woven on three treadles (treadle 1: 1-2, treadle 2: 1-2-3, treadle 3: I-2-3-4, rising shed). The plan was to make a triangular dot -- an effective spot on some materials but in this case the crepe effect of the yarn blurred the triangular outline so that the plain, square dot would have been better. To add a little color to the simple harmony of chartreuse Willamette and aqua boucle, the dots were woven of aster (light redviolet) boucle and one of the boucle shots for the cross-bars was of this color, the other aqua to match the vertical lines. The simple design with unusual color combination gave an unusual fabric with vitality and real beauty.

WHAT REEDS DOES THE HANDWEAVER NEED? -- Question.

The question this month is asked so many times that it merits a lengthy discussion.

The sley is the arrangement of warp ends through the reed. Any single reed is adaptable to many arrangements when one considers sleying I per dent, 2 per dent, 3 per dent, 4 per dent, and so on; sleying and skipping dents in any set sequence; sleying alternations of 1, 2 repeated, 2,3 repeated, 3,4 repeated, and so on; Sleying sequences such as 1,1,2, repeated, 1,2,2 repeated, 2,2,3 repeated, and so on; and even more elaborate arrangements than these. However, many reed arrangements which are mathemetically plausible are impractical on the loom because of such matters as friction between reed and warp ends, friction between crowded warp ends, and reed marks in the fabric which do not spring into even spacings. Reed marks are a feature which in some cases, as with skipped dents, may be used with decorative intent, but these textures are a separate subject.

For the following Sleying Tables the objective in each case is a smooth, regular fabric. Here are some of the guides which experience teaches regard⊶ ing sleys. The most desirable sley for most smooth textiles is 2 per dent, repeated throughout. Ordinarily, sleys wider than I, O alternated, are not practical as the dent is too narrow for the yarn size. A sley of I per dent is not generally practical for sets closer than 20 per inch because there is too much friction between warp and reed. A sley of I per dent makes shedding difficult when the warp is wool, singles linen, or any rough yarn. A sley closer than 3 per dent crowds the threads and makes shedding difficult. No reed marks remain in the finished textile for the alternate sleys when the weaves are firm. Reed marks may result with the use of very heavy yarn. Reed marks are almost unavoidable when the sley rotation involves 3 dents.

TABLE of REEDS and WARP ENDS PER INCH

Dents	SLEY (2 dent repeats)					
per inch	1,0	اوا	1,2	2,2	2,3	3,3
б	3	. 6	.9	12	15	18
7	3 <u>1</u>	7	10 <u>1</u>	14	17.1	21
8	4	. 8	12	16	20	24
9	41/2	9	13½	18	22분	27
10	5	10	15	20	25	30
11	5 <u>1</u>	14	16 <u>1</u>	22	27 <u>1</u>	33
12	6	-12	18	24	30	36
14	7	14	21	28	35	42
15	7 <u>1</u>	15	22 <u>1</u>	30	37 <u>1</u>	45
16	8	16	24	32	40	48
18	9	18	27	36	45	54
20	10	20	30	. 40	50	60

Sleys are given for two adjacent dents.

^{1,0} means: sley one, skip one, repeat.
1,1 means: I per dent throughout.

^{1,2} means: 1 and 2 per dent, alternated.

^{2,2} means: 2 per dent throughout.

^{2,3} means: 2 and 3 per dent, alternated.

^{3,3} means: 3 per dent throughout.

TABLE of WARP SETTINGS with APPROPRIATE REEDS

```
Reeds Which Give These Settings
Ends per Inch
      3 ----- 6-dent,
      4 ----- 8-dent,
      5 ---- 10-dent,
      6 ----- 6-dent, 12-dent,
      7 ---- 7-dent, 15-dent,
      8 ----- 8-dent, 16-dent,
      9 ----- 9-dent, 18-dent,
     10 ---- 10-dent, 20-dent,
     || ----- ||-dent,
     12 ---- 6-dent, 12-dent,
     13 -----
     14 ---- 7-dent, 14-dent,
     15 ---- 6-dent, 10-dent, 15-dent,
     16 ---- 8-dent, 16-dent
     17 -----
     18 ----- 6-dent, 9-dent, 12-dent, 18-dent,
     20 ---- 8-dent, 10-dent, 20-dent,
     21 ---- 7-dent, 14-dent,
     22 ----- II-dent,
     22<del>2</del>----- 9-dent, 15-dent,
     24 ----- 8-dent, 12-dent, 16-dent,
     25 ---- 10-dent,
    26 ----
     27 ---- 9-dent, 18-dent,
     28 ----- 14-dent,
     29 -----
     30 ---- 10-dent, 12-dent, 15-dent, 20-dent,
     32 ---- 16-dent,
     33 ---- II-dent,
     35 ---- 14-dent,
     36 ----- 12-dent, 18-dent,
     40 ----- 16-dent, 20-dent,
     42 ---- 14-dent,
     45 ---- 15-dent, 18-dent,
     48 ----- 16-dent,
     40 ---- 20-dent,
     54 ----- 18-dent,
     60 ---- 20-dent.
```

TABLE of MOST COMMONLY USED WARP SETTINGS

Ends per Inch Reeds Which Give These Settings

```
* 6 ----- 6-dent, 12-dent,

* 10 ----- 10-dent, 20-dent,

* 12 ----- 6-dent, 12-dent,

14 ----- 7-dent, 14-dent,

* 15 ----- 6-dent, 10-dent, 15-dent,

* 18 ----- 6-dent, 9-dent, 12-dent, 18-dent,

* 20 ----- 8-dent, 10-dent, 20-dent,

22½ ----- 9-dent, 15-dent,

* 24 ----- 8-dent, 12-dent, 16-dent,

* 27 ----- 9-dent, 18-dent,

28 ----- 14-dent,

* 30 ----- 12-dent, 18-dent,

42 ----- 14-dent,

45 ----- 15-dent, 18-dent,
```

* -- The iten most important warp settings

The first Table shows six safe sleys for twelve different reed sizes. The second Table indicates what reed or reeds may be used for any of thirty-four different warp settings. The third Table, which is a simplification of the second one, can serve the weaver as a guide in the selection of reeds which will be generally useful.

Some discussion, or justification, of these sleys may be useful. The sley of 6 per inch is the one most commonly used for rug weaving. The sleys of 14, 21 and 28 per inch are widely used in weaving wools, particularly tweeds. The sleys which are closer than 36 per inch are used mainly for fine linens. Thus it is evident that the sleys of between 6 and 36 ends per inch embrace the usual handwoven fabrics.

Certain liberties may be taken in substituting

sleys, particularly among the closer warp settings. For instance, if a sley of 27 or of 28 ends per inch is indicated, either one will be satisfactory and it is not necessary to have reeds for both, but a sley of 30 per inch will be too close and of 24 per inch too wide. Likewise, 30 and 32 ends per inch may be mutually substituted, or 24 and 25, or 40 and 42, or 42 and 45. The sley of $22\frac{1}{2}$ ends per inch, made by an arrangement of 1,2 alternately in a 15-dent reed is a common substitute for 24 ends per inch by weavers who own a 15-dent reed but no 12-dent. popularity of the 15-dent reed among loom manufacturers is hardly understandable in view of the warp settings which weavers can most advantageously use. The sley of 15 ends per inch is actually a poor one for most commonly available materials, and it would be little used except for the fact that most loom owners have a 15-dent reed even if they have only a single reed. The sley of $22\frac{1}{2}$ per inch is useful, as is that of $37\frac{1}{2}$, though both of these are usually substitutes for 24 and 36. The sley of 30 per inch is one of the most frequently used, but it can be obtained from a 10-dent or a 12-dent reed. However, in this instance, we are forced to go along with the loom manufacturers and make the most of the ubiquitous 15-dent reed, though anyone ordering, a new loom may always ask that a reed of a different dentage be substituted for the usual 15-dent.

The first table shows that the 12-dent reed has six practical arrangements, each one of which occurs in the list of the ten most important warp settings. This indicates that the reed with 12 dents per inch is without question the most useful of all reeds — the one which no weaver should be without. The 10-dent reed gives four settings which are included in the ten most important, and five if one considers 25 per inch an adequate substitute for 24 per inch. Thus, this may be considered the second most important reed. Nine of

the ten most important sleys may be achieved from a 10-dent and a 12-dent reed. The 15-dent reed gives only two of the most important, a 10-dent and a 15-dent give only five, and a 12-dent and a 15-dent give eight. The one remaining set which none of these three reeds will give is 27 per inch, which may be made with an 18-dent reed, making the 18-dent reed the third one in importance.

Summary of the Order of Importance of Reeds Basics

Ist reed --- 12 dents per inch,
2nd reed --- 10 dents per inch,

3rd reed --- 18 dents per inch,

4th reed --- 15 dents per inch,

<u>Optionals</u>

5th reed --- 14 dents per inch,

6th reed --- 20 dents per inch,

7th reed --- 6 dents per inch.

The well-equipped general handweaver will own at least four reeds. Specialization of interests may often indicate the use of other reeds. Many weavers like to use the warp settings of 16, 24, 32, 40 and 48; in fact, some would place these in the list of the ten most important settings. These require a 16-dent reed. Others find $13\frac{1}{2}$, 18, $22\frac{1}{2}$ and 27 desirable and like a 9-dent reed. The Il-dent reed is useful, though uncommon. Weavers who specialize in very heavy tweeds prefer a 7-dent to the 14-dent. The 4-dent reed is used by many who weave warp-reps, and this reed is also an excellent substitute for a raddle when beaming from a chain. Weavers who specialize in the very fine linens such as 60/2, 70/2 and 100/2 usually use finer dentages than those suggested.

One generalization may be made -- that upon the thoughtful selection of reeds will depend much of the quality and the versatility of the fabrics which are woven.

USE of ROYARN -- Guild-member Contribution.

Miss Kate Van Cleve, The Garden Studio, 14 Marshal Street, Brookline, Mass, noted teacher and author of HAND LOOM WEAVING FOR AMATEURS, sends the following suggestions:

"We have been working quite a little with Robinson's new Orlon yarn and have found it very nice to use. We have used the 8/2's for both warp and weft for luncheon sets and for men's scarves. If it is steam pressed after weaving, it comes out beautifully in the scarves and feels almost like a heavy silk in handling, while the luncheon sets, which we wove at 30 to the inch, are very firm and attractive for the table. The scarves were set at 24 threads per inch."

BOOK REVIEW

HANDWEAVING: DESIGNS AND INSTRUCTIONS, by Lotte Becher, The How To Do It Series - Number 52, The Studio Publications, London, 1954.

This new arrival from England is a truly outstanding book for the beginning handweaver. The instructions are short, but concise and accurate, and they are enhanced by excellent photographs and line drawings. Although the opening chapters are devoted to choosing and dressing the loom and to explaining drafts, there is good advice on designing and the main part of the book is devoted to a series of complete recipes for specific weaving projects, illustrated with drafts and photographs, and sketches where required. Although the designing is not outstanding, it is good, and it covers a wide range of textiles. The beginner will learn many useful techniques and methods with little effort from this. The book may be secured for \$5 From the Craft & Hobby, Coast Route, Monterey, Cal. My Dear Guild Member: MARCH Chendoles

On the enclosed sheet are some special prices we are making because we need to clear file space. The announced TWILL and TARTAN not included on the list because they just plain are not finished.

Mr Elmer Hickman, R2, Emlenton, Pa announces the publication of Folio 6. It contains 20 sparkling fabrics in modern spirit with complete directions and samples. Price \$9.95. For sale by Mr Hickman only. Weavers who have the first 5 Folios will of course wish to continue the series and new weavers will find the Folio worth getting acquainted with. Mr Hickman's designing is splendid. Half of the designs are from other weavers, most of them Guild members. Mr Hickman announces there are still a few copies of Folio 5 -- 27 projects for \$12.75 and that sheets and photographs without samples for Folios 1, 2, and 3 -- 40 projects -- may be purchased for \$7.95. We are glad Mr Hickman is so pleased with the drafting pens we have for sale.

The Office of Indian Affairs, Haskell Institute, Lawrence, Kansas, asks me to announce that I made a typographical error listing some of their handcraft publications in the November BULLETIN. The price of IROQUOIS CRAFTS is \$0.50, not \$0.05 as 1 said.

Mr Veren of the Craft and Hobby Book Service, Coast Route, Monterey, Calif writes that he has a new stock of translations of the Swedish MONSTERBLAD folios ##1, 2, 3 and 4 at 60% each. And he has had a translation of the new one, #10 on wool fabrics, made which he will sell for 35%. The folios with Swedish text and color photographs are \$2.50 each.

The over 30 "handwoven" Christmas Cards which came to us this year are a thrilling collection. Every year they seem to get better in conception, designing and craftsmanship. Sincerely yours,

