THREADS - THE WEAVER'S MATERIALS.

The selection of yarns and threads with which to weave is one of the most important problems which confront the weaver. With threads on our looms we build the fabrics of different textures according to the kind and size of thread we use, how close it is set in the reed, and what kind of weaving technique is employed.

The quality of this fabric may be thick or thin, soft and pliable, hard and boardlike, dull or shiny, rough or smooth. Texture, the "feel of a cloth," is at present an important factor in modern textiles. It offers a wide field for experimentation to the handweaver. Weavers should always be on the alert to try out and use many of the new synthetic yarns and threads which manufacturers are now developing.

Several factors can help us decide what yarn or thread to use. These willguide us to make the selection from the great number of different kinds of material now available. The first thing to consider in selecting a thread is whether it is suitable to the use or purpose of the textile to be woven. As an obvious example, we would not choose a linen thread if we were going to make a warm blanket, or a wool thread for glass curtains. This at once puts our choice within a more or less definite limitation, due to the inherent properties and qualities of the thread itself.

Threads can be classified as animal, vegetable, and man-made or synthetic. The animal fibers include wool, hair, silk, and the vegetable; cotton, linen, hemp, jute, etc. While the synthetics include rayons, latex, cellophane, and many other new threads developed during the war, it is not my purpose here to go into the physical and chemical characteristics of these different fibers, and the methods of testing them. There are a number of excellent books which almost any good library can supply. "Textile Fabrics" by Isabelle Wingate, published by Prentice-Hall in 1937, or "Textile Fabrics and Their Uses" by Katherine P. Bissell, are good references. The Wingate book has an excellent bibliography if one wishes further study on this subject.

After we have decided what we are going to weave, its use and purpose, we must consider what size and kind of yarn or thread to use to produce the texture desired for that article. And this kind of yarn also must be suitable to use for the pattern design and the weaving technique to be employed to weave the textile. All of these factors have to be decided before one can start to weave. In other words, the textile needs to be designed, no matter how simple it is.

There are general rules, or one might say suggestions, for uses for the common threads such as carpet warps, 20/2 cotton, 40/2 linen, etc. And many of these have been given in the "News" with the patterns and techniques employed to weave a specific article. But it has always seemed to me to be difficult to formulate rules to fit all requirements, which apply to all instances for the use of all kinds of threads. Choices are or should be governed by the individual taste of the person who is going to use the textile, and where and how it is to be used. Some people like to weave with coarse threads, while others prefer fine threads and close textures. A textile is never used alone. It is always "related" to something else and it cannot be judged fairly all by itself. Is it to be decorative, used as an accent, or entirely utilitarian in its purpose?

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Exhibits of handweaving are very valuable to the weaver who is desirous of learning how to use threads for his own projects. With my own students I use woven samples of different kinds and technique all of the time. It is always of much help and inspiration to see how someone else has used different kinds of threads and yarns, and then one can actually see and judge for themselves what they wish to do. Many exhibits of different types of weaving are available to handweaving News subscribers. I have an exhibit of weaving done exclusively on the Hearthside Loom, and I am always glad to assemble a special exhibit for anyone.

Here I would also like to stress the importance of making experimental samples of every technique and threading draft which you set up on your loom. Very frequently someone says to me, "I had no idea so much could be done with this technique." Try out different colors, as well as different kinds and sizes of yarn and threads in these samplers. Save and file them with full information concerning the material used in them. Also keep a notebook. You cannot remember just how much you used and how much threads cost, write them down. A simple method of identifying samples or in fact woven articles is to mark them with string tags with the following method, 46-1, can refer to the first article woven in 1946, 46-2, the second and so on.

Making samples is an important part of weaving. For a large project where a special effect is wanted, it is always advisable to try out a small sample of the thread and weave which has been decided upon. This does take a little more time and possibly involve a little more expense for the threads. But through doing this you are sure what the finished article will be like, and a little experimenting may give you some entirely new and different ideas. This is not a waste of time, even though beginners sometimes may think so.

Whatever their use and purpose, handwoven textiles are often very lasting and durable fabrics. For this reason, one should always be sure the threads purchased are fast to light and washing, if the article will need to be washed. Get into the habit of reading the labels on balls and skeins of yarn and threads you buy. See what the manufacturer has to say about his product. Many wool yarns are now mothproofed. Look for this on labels. Also look and see how many yards there are in the ball or skein you are buying and whether the material is fast color or not.

If there is any doubt about color fastness of yarns and threads, test them by washing them and exposing them to the sun. Keep a small sample out, then compare the washed thread to this. Such treatment may save you much grief. It is most discouraging to have hours of work wasted through having colors run when the fabric is washed and finished. I well remember a dozen handwoven green towels I did for a special order. When they were washed they all faded out a dirty grey which never did come out, and the order had to be done all over again.

It is generally better to buy standard yarns of reliable dealers who stand back of their products. Such threads can almost always be duplicated if more is needed or an order is duplicated. Colors in different dye lots often vary slightly so it is best to over-purchase what you think you will need, rather than to figure too close on amounts needed for a definite project, and then run short before it has been finished.

Another problem which has to be decided is how close to "bleat" or set a thread or yarn in the reed. On this depends the real success or failure of the weaving. For the resulting textile should not only be suited to its use and purpose, but it should also be of the right texture. Here too the value of a sample comes in. One reed will not do for everything one wishes to weave. Weavers differ as to the size of reed they prefer. Our experience leads us to believe that a 12, 15, and 20 dent reed are the ones which are the most useful to have on hand. The "Nellie Sargent Johnson" loom is sold equipped with a 12 dent reed, which is suitable for most run weaving sleyed with one thread of carpet warp in a dent. For a coarser warp, or the carpet warp threaded double in the reedles, every other dent of the 12 dent reed will give 6 threads to the inch. Or for finer threads, 2 threads can be sleyed in a dent to give 24 threads to the inch. Thus a 15 dent reed will give 72, 15, and 30 threads to the inch. And a 20 dent reed will give 10, 20, and 40 threads to the inch. These sizes will be suitable for most things one will weave on a hand loom.

Another thing which affects texture is the beat. Some weavers beat very hard, and others very lightly. As a general rule wool yarns are beaten lightly, but of course this again will depend on what is being made.

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Warp Rep. When the warp is set so close in the reed that it completely covers the weft, it is called a warp rep fabric. Carpet warp set from 24 to 30 threads to the inch will cover a weft of rags.

Weft Rep. When the warp is set far enough apart so the weft thread completely covers it we have a weft rep textile. When there is equal spacing of the warp and weft in a fabric, the warp is set so that there are the same number of warp threads to the inch as there are weft shots to the inch, and both will show equally in the finished material.

Suppose you have your warp all set up on the loom for a rag rug, and you want the weft to cover the warp. If it does not cover the warp when you try it out, there are two things you can do. The first thing is to cut the rag weft fine enough to make it cover the warp. But this will tend to make a light weight rug. The alternative is to set the warp further apart. If the warp is set at 12 threads to the inch, sley every other dent with 2 threads to a dent and skip a dent which gives 6 threads to the inch. This is an important principle of weaving and should be understood.

If the cloth is sleazy, the warp is too far apart. This can be corrected by using a heavier weft thread, or a double weft thread if the weft is too fine. Or the warp can be sleyed closer together in the reed. Many times with a new thread, the only way to determine the number of threads to the inch, is to try out a sample. If the weft thread is put through the shed and pulled too tightly so the edges pull in, the edge warp threads are not only apt to break, but it may also be impossible to beat down the weft closely. Often this is the reason why the weft cannot be beaten as close as may be desired.

Weaving with Native Materials. There are many simple materials with which one can weave interesting and unusual fabrics. I sometimes think people do not try to use their imagination enough to devise simple ways of using such things. We use a great many corn shucks for place mats on the Heart HMSIDE Loom. These can be dyed, boiling the shucks up in regular commercial dyes for about 2 or 3 minutes, and then allowing them to cool in the water. Rinse well to wash off the surplus dye, and dry. When using the shucks they can be stripped into thin strips and placed in the shed. Roll them in a damp towel to keep them damp. Last fall we tried weaving the gold wheat stalks, but they are rather slippery and have a tendency to slide. Broom sedge or sage grass, goldenrod stems stripped, and cat tails may also be used, and some of the natural colors are very lovely.

How to Open a Skein of Yarn or Thread. It may seem strange to many of you to know that some people do not know the correct way to open a skein of yarn or thread in order to keep it from becoming tangled and a nuisance to wind on the shuttle.

This is very easy to do if you do it right. Unroll the skein. Take it on both hands as you would to make a cats cradle. Loosen and pull it out, by bringing the hands in and out, making the yarn taut then loose. This has a tendency to straighten out the threads. Then cut the places where the skein has been tied, and fine the place where the ends are tied together. Cut the ends apart. Put the skein on a reel, or over the backs of two chairs if a reel is not handy. Wind the shuttle directly from the skein. When finished with the winding and putting the skein away, twist the two ends together and tie; then twist up the skein again, and turn one end back around the other end.

Skein ready to tie ends A and B.

Twisting the skein.

Cross ends A and B. Carry around skein and tie around the skein.

Twist the two ends together and tie, then twist up the skein again, and turn one end back around the other end.

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