

Twill, Herringbone, and Rose-path Threadings.

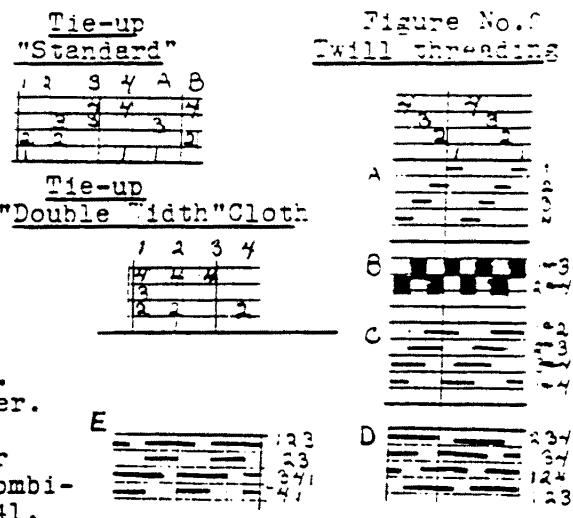
These threadings form the basis of much weaving and their use and variations are many. To the beginner perhaps it may not seem as though they could be so useful and interesting, because they are simple and easy to thread into the loom.

Uses for twill, herringbone and rose-path. These threadings are the next step beyond the two harness weaving, and of course can be used in many of the same ways as two harness variations. And they can be used for practically all kinds of woven materials, as tweeds, linens, upholstery fabrics, draperies and curtain materials, rugs etc. They are being much used for modern effects where pattern has become of less importance than texture interest. "Vavbok" by Eva Ödlund and other of the Scandinavian books on weaving devote much space to these threadings. E.A. Poseltdt "Dictionary of Weaves" is another book which is entirely made up of many different arrangements of twills.

Twill and its Complete Tie-up. At Figure No.1 given above is one repeat of the twill threading represented by black squares. Beginning at the bottom square, one thread on harness 1, one on harness 2, one on harness 3, and one on harness 4. This is then repeated across the width of the loom for number of warp threads required. The X's represent how the 4 harnesses are tied to the treadles, and the numbers below these X's the treadle number. Thus the complete tie-up for twill would require 14 treadles if all were to be tied up at one time on the loom. Beginning with the figure 1 or treadle 1 of the complete tie-up, the X means that the 4th harness is tied to the first treadle, continuing with 2 the second treadle is tied to the 3rd harness, 3 or the third treadle is tied to the second harness, and 4 or the 4th treadle is tied to the first harness. On most looms the harnesses are tied one to each lamm, and then the lamm is tied to the treadles as indicated on the tieup draft. Treadles 5 and 6 are the tieup for plain weave, often called binder or tabby. The location of these treadles is a matter of choice with the weaver. Some persons like to have them both together and the last two treadles on the right hand side, others tie them in the center between the pattern treadles, while others tie them one at the extreme left and the other at the extreme right. It makes no particular difference where they are located, they are for the plain weave and always tied to bring down harnesses 2 and 4, and their opposites harnesses 1 and 3, in this standard twill threading draft. The woven effect of weaving with only one harness is shown at A of Figure No.2 on Page 2, the effect of weaving the plain weave treadles is shown at B of Figure No.2. If your loom has only four treadles, you have to weave with two feet in order to bring down more than one harness at a time. At C of Figure No.2 is shown the "two and two" twill effect, or in other words each weft goes over and then under two warp threads consecutively as the pattern treadles are brought down in order. The drawing shows how the pattern effect can be worked out. Of course these pattern treadles can be brought down to weave in any desired order, and the plain weave treadles should alternate after each pattern weft shot if the same treadles is used for several pattern weft shots. This is the principle of all so called "over-shot" weaving.

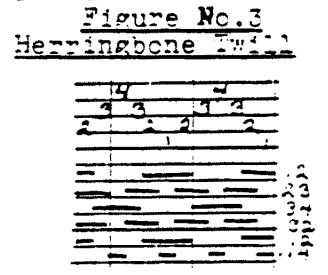
Treadles 7, 8, 9, and 10 of Figure No. 1 Page 1, are the so called "standard" tieup for a loom with 5 treadles. The same thing written with figures instead of K's is shown at Figure No. 2. The woven effect is given at C. Figures at the side of the drawing represent the harnesses brought down.

Treadles 11, 12, 13, and 14 of Figure No. 1 give just the opposite woven effect from A. They are the combinations which weave a "three and one" twill. In weaving any of these 14 tieup combinations may be used to produce different effects. Drawing down woven effects on paper: It is often desirable to draw out possible plans for weaving on paper first. Shots of weft may be drawn by solid black squares or by a single line across on cross section paper. Single dots represent a skip over one thread. Thus at A of Figure No. 2 the weft goes over 1 and under 3 warp threads; at B it goes over 1 and under 1, on one row and on the next row over and under the opposite warp threads. This gives plain weave, often called tabby or binder. At C, by using the "standard" tieup we have a two and two twill, at D just the opposite of A, or over 3 and under 1 warp thread. While at E, we have a combination of the following harnesses 123, 23, 341, and 41.

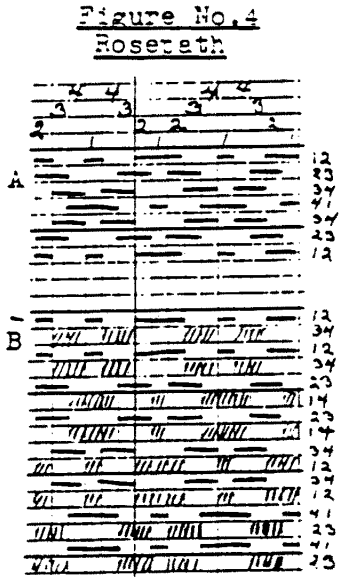


Double Width Material. It is often desirable to weave double width material on a four harness loom, and this can be done on the regular twill threading. Start to thread with the first thread on harness 2, then 3, 4, and 1, 2, 3 and 4 for the width of the warp. Sley the warp twice as close as desired for the finished material, as one half of the warp is on top of the fabric and the other half is underneath. Use treadles as given on the tieup in regular order, one shot on each change. Repeat for length desired. On Structo loom, use the levers according to the spaces on the tieup draft. The closed side of the weaving comes on the right hand side of the material.

Herringbone or Reverse Twill. Two repeats of this are shown at Figure No. 3. One woven repeat is drawn down using the standard tieup as at Figure No. 2 above. But any order of weaving can be used. If one treadle is repeated more than once, alternate shots of plain weave should be put in after each pattern shot to hold the fabric together.



Roserath or "Rosengang" threading. It is easy to see how this simple threading evolved by the addition of just one more thread added on the first harness to the reverse twill threading. This simple draft has many uses. Many variations of it are seen in the Scandinavian books, and I am told, there, it is considered peasant weaving. At A of Figure No. 4 is the simple standard tieup used, and at B the harnesses used "on opposites". For this two colors are used as indicated on the drawing. Many unusual interesting woven effects can be gained by weaving in this fashion, there is no plain weave used between the pattern shots. Many simple borders can be woven on this threading.



Combinations of Twill, Herringbone and Roserath. It is possible to create many different threading drafts by combining these three simple drafts in any way desired. This method was described in Handweaving News for June 1936 and 1937 if anyone wishes this. Different Methods of Writing Drafts and Tieups.

