## TRANSPOSING WARP AND WEFT

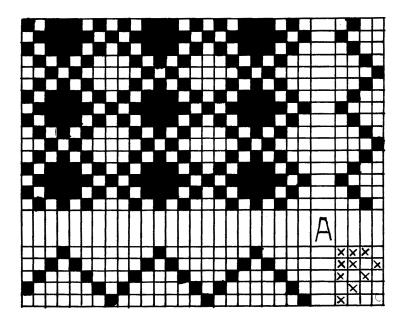
## by Berta Frey

One of the "stunts" of weaving that is profitable as well as fun is transposing the threading and treadling drafts. This is illustrated by the diagrams at Figure 1. At A is the diagram analysis of a waffle-weave fabric that is done on five harnesses and with four treadles. Turn the diagram on its side as at B, and it becomes a four-harness weave done with five treadles. Use identical yarn for warp and weft, cut off the selvedges, and it will be impossible to tell which draft was used. The fabric is identical on both sides, which is not always the case with a four-harness woven waffle cloth.

Before I learned this stunt, I had often put on a colored warp, only to be disappointed when it came off the loom. Perhaps I wished that I had used two less ends of this color, or possibly six more ends of that; maybe it was that I wished the accent warp had been placed on harness three instead of harness four. And what a fickle friend is color! Two colors in skeins may be perfectly beautiful next to each other, but how often it happens that when these two colors are put in the warp where they must share a common weft, they immediately declare war on each other. Now I set up a sample loom with the weft yarn and try out the proportions and placements of color and texture to find the best arrangement.

Recently, when playing with bound weaving on a huck threading, I thought of belts. But bound weaving is slow going, and there would be the problem of raw edges to be turned under. The answer was to transpose the drafts, and weave a band or ribbon. The weaving is fast, and there is no "finishing" needed.

Bound weaving is always more easily done on a loom where one harness at a time can be used. Tie one harness to one treadle. In weft-faced bound weaving, the treadling is always 1, 2, 3, 4, repeated, and one harness at a time is down, if the right side is to be the visible side during weaving. In warp face bound weaving the treadling follows a pattern draft, and one harness at a time is always up.



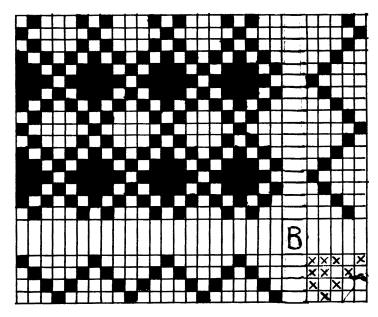


Figure 1

Figure 2 shows a sample of bound weaving on huck threading. The background of this is royal blue, followed by white figure with crimson centers

Warp is 18/1 linen at 15 ends per inch Weft is 20/2 mercerized pearl cotton.

crimson
light green
dark green
tawny tan
medium brown
beige
crimson center.

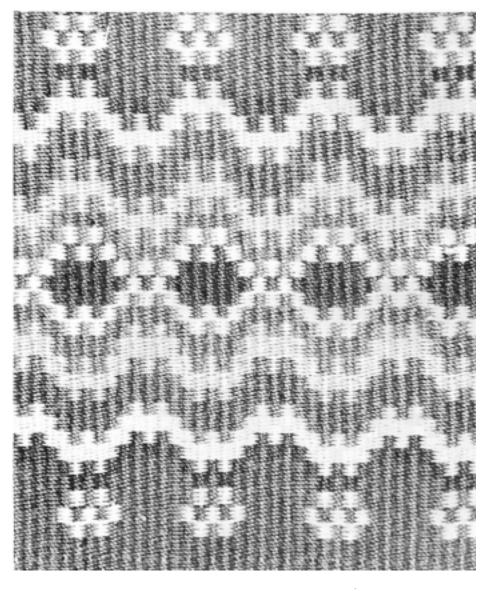


Figure 3 has a gold background, with black spots, then black medium grey-green dark green wedgewood blue black Warp is 18/1 line kelley green center. Weft is 2/14 wor

Warp is 18/1 linen at 15 ends per inch Weft is 2/14 worsted.

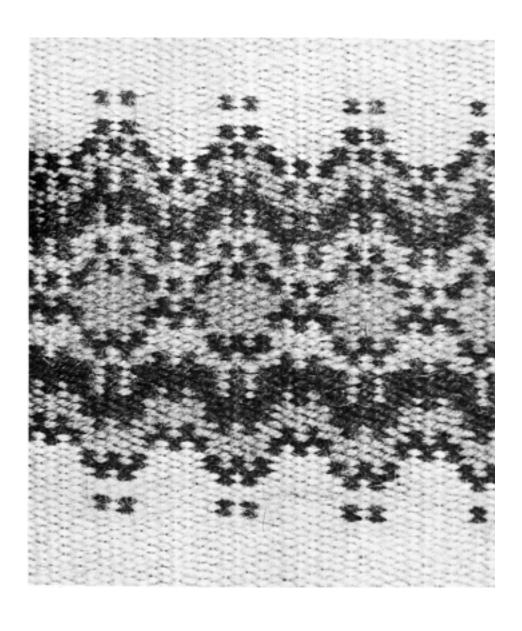
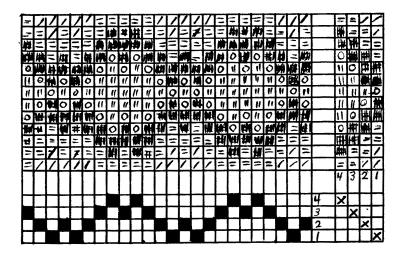


Figure 4 shows a diagram of a small portion of one of the sample designs. This was made in order to find the threading draft for the belt, which is shown at Figure 5. Each group of four ends was repeated so that there were a total of 112 ends in the warp. A 10-dent reed was used, and *eight* ends per dent. Pearl cotton #5 was used for the warp, and the finished belt is one and a half inches wide.

The treadling is one harness at a time *up*, and follows the regular order of the huck draft. The weft is the same yellow yarn as at the edges of the band. In weft-faced bound weaving, the order of treadling never changes; it is always 1, 2, 3, 4. But in putting the color in the warp, it is necessary to change the direction of the twill at the center. This is because of the twist in the yarn.

Bands, or straps, or ribbons, or what-you-will made by this warp-faced method are faster and easier than card weaving or inkle. When I had a dog, he always wore card woven harness and leash. My next dog (if and when I have another) will wear warp-faced woven clothes.

Figure 4



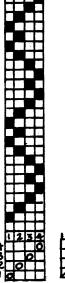




Figure 5



## Meet the Author

Few handweavers in the United States have had as long a career at the loom as Berta Frey, who started weaving during the first World War when she was an Occupational Therapist in an army hospital. Stimulated by patients' interest in handweaving, but frustrated by the fact that there were no handlooms made in this country, one of Miss Frey's early achievements was turning her woodworking specialty to the job of constructing suitable equipment for her patients, and then for her own expanding interest in textile creation. Starting as most early handweavers did, with our Colonial heritage in handweaving designs, Miss Frey's active mind soon reached out to other design expressions. Her little book, SEVEN PROJECTS IN ROSEPATH, was one of the first guides for new handweavers in this country. Through the forty or so years of her handweaving career Miss Frey has participated in most of the professional aspects of the craft, as a custom weaver, a textile designer, a writer, and most especially as a teacher with studios first in Washington D C, and then in New York. More recently Miss Frey has become one of the most popular of Guild lecturers and has made many lecture tours throughout the United States. Those who cannot hear her talk, share her intelligent instruction through her practical articles which appear in each issue of HANDWEAVER AND CRAFTSMAN. Those fortunate weavers who are taking Mr Hewitt's Handcraft Tour of Mexico in June will have Berta Frey as their tour hostess.



