

Two-Shed Weaving

III. SOME WARP-FACE WEAVES

BY MARY M. ATWATER

A WARP-FACE fabric is one in which the warp almost or entirely covers the weft. Any pattern effects produced are threaded into the loom with the warp — not woven in with the shuttle.

As a rule the warp material used is finer than the weft and is set very close together in the reed. The woven fabric has a ribbed appearance, the ribs running crosswise. It is, in fact, the opposite of the "cannalé cord" type of fabric described in the second article of this series.

Several familiar commercial fabrics are constructed on the warp-face plan — "poplin," "bengaline" and "rep," for instance. These are particularly firm and durable fabrics, as we all know.

European hand-weavers do a great deal of warp-face weaving, but in this country the warp-face weaves have been much neglected — one rather wonders why, as the weave has many special advantages.

Possibly our weavers hesitate to try this weave because of the labor involved in warping a large number of threads. But those who warp by the sectional method surely need not worry about that! A few more spools of warp, an additional creel or spool-rack, a few more holes in the guide — these things are easily accomplished. For a wide piece of work it may be necessary to equip the loom with additional heddles, but this, again, is a simple matter.

It is true that the threading takes somewhat longer on account of the larger number of threads to be drawn in, but this difference in time is more than compensated by the great rapidity of the weaving.

Weaving time is, of course, of interest chiefly to those among us who make things for sale. It is the chief element of cost in the finished article, and if it can be very greatly reduced it is possible to increase sales by lowering selling prices and at the same time have a better margin of profit. To those among readers of the *Handicrafter* who are planning their work with an eye to profit, the warp-face weaves are especially recommended.

Take, for instance, the bag shown in Illustration No. 1. This is a bag brought back from Italy by a returning traveller. It is made of a very simply designed warp-face fabric in fine cotton in bright colors, woven with a rough tow or fine jute filling that gives firmness and stiffness to the material. It is made up by folding

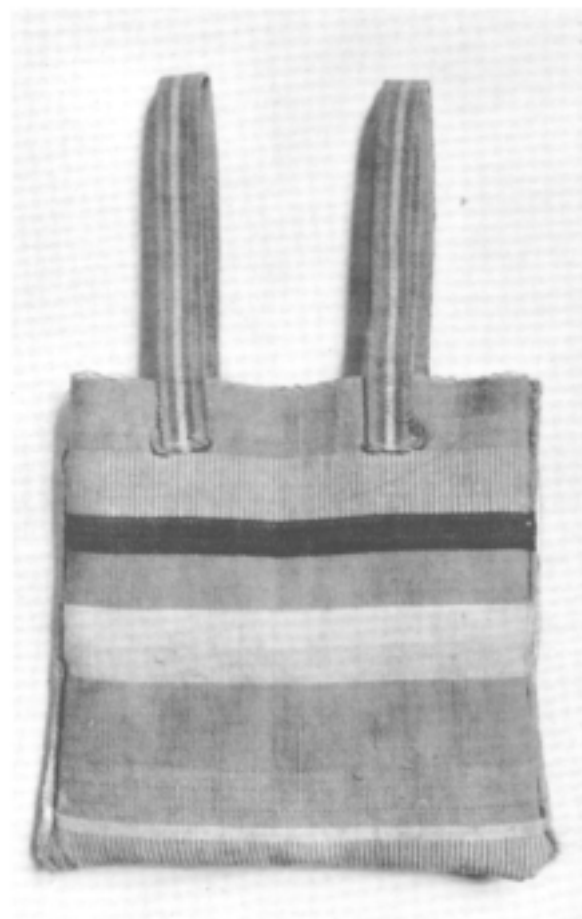


Illustration No. 1

in the middle and stitching the sides, no lining being required. The handles are two narrow strips of the same fabric stitched on. To weave the 12" strip required for this bag would take about twenty minutes, stitching on a sewing machine, five or ten minutes more. The threads used are not costly. Here is an article of a good deal of charm and practical use that can be made and sold at a very reasonable price. (For the photograph

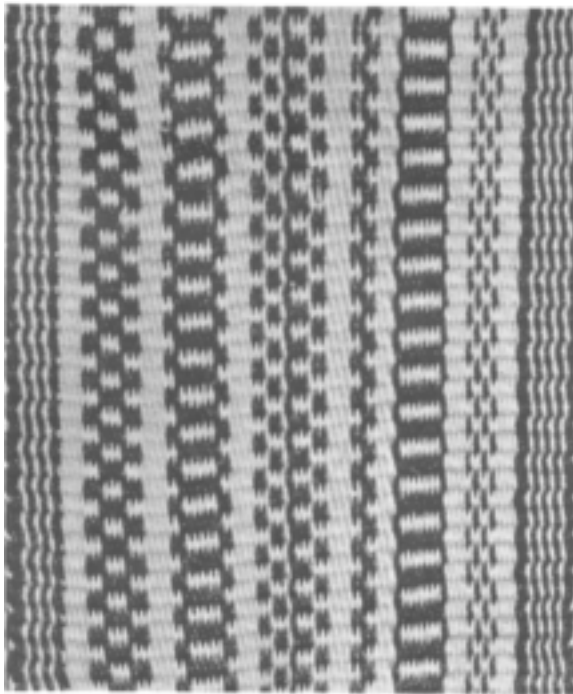


Illustration No. 2

the bag was turned inside out to show the manner of attaching the handles.)

The warp used in this bag is an unmercerized cotton about the grist of our "20/2" cotton, dyed in strong colors — turkey red, canary yellow, a vivid bluish green, a strong blue. This particular material is not readily obtainable from our dealers, but one could have unmercerized cotton dyed to order, of course, or one could even use mercerized material, though the effect would not be the same. The setting in the reed is about 60 to the inch. The complete warping scheme is as follows: 3/4" turkey red; 3/4" green; 1 1/2" red and yellow, threaded alternately (this gives the ribbed effect); 3/4" blue; 1 1/8" red; 3/4" white; 3/4" yellow; 2 1/4" red and white, threaded alternately. This ribbed red and white stripe is the middle stripe of the fabric and forms the bottom of the bag when the material is folded. The stripes should be repeated in reverse order from this center stripe back to the beginning.

The threading is simple 1 and 1 — front, back, front, back — and weaving is plain tabby with one shuttle.

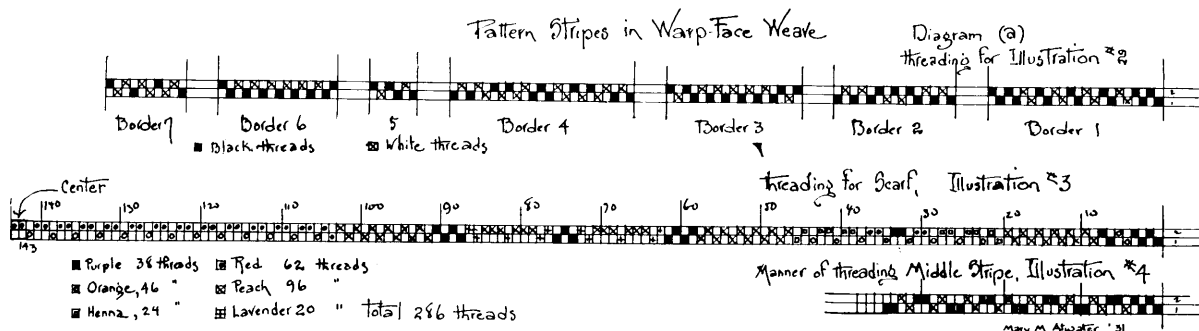
Illustration No. 2 shows a number of simple little pattern borders in warp-face weaving. These depend on the use of contrasting colors in the warp, threaded as shown on the diagram. The material used in making the sample was rayon in black and white set about 40 to the inch, woven — eight shots to the inch — in heavy linen floss. Weave is plain tabby with one shuttle.

In making this piece no reed was used. In making narrow pieces it is quite easy to keep the desired width by drawing the weft-thread as tight as may be necessary. For wide pieces it is best to use a reed, but this should be a very coarse reed — one with not more than 4 or 6 dents to the inch — otherwise the close-set warp will stick in the reed and it will be difficult to open the sheds. A flat "poke-shuttle" is the best kind of shuttle to use, and this is also used to beat up the material by putting it through the open shed and squeezing the woven threads together.

The rayon and linen fabric of the sample is a smooth, firm fabric, excellent for chair-seats and similar uses. It might also be used for bags of the type of the Italian bag described above. Done in fine silks it is a lovely fabric for bags and purses of a smaller size. And it will be readily seen that by arranging the borders symmetrically and using a variety of colors, very gorgeous effects are possible.

Among the interesting things that are coming in from abroad are some delightful little narrow scarves of fine wool woven in the warp-face manner. Some of these are quite elaborate in pattern and were woven on a draw-loom such as is in quite general use in some parts of Europe and almost unknown here. The interesting things about the scarves however, are the size and texture rather than the patterns. Those I have seen were 5 1/2" or 6" wide and a little over a yard long; they were made of fine, soft wool in lovely colors, very lightly woven.

The scarf shown at Illustration No. 3 is a piece of similar construction in two-harness warp-face weave with a little figure in "pick-up" weaving.



The warp used was Bernat's tapestry yarn set at about 60 to the inch, and the weft was the same material, — ten shots to the inch. A brilliant color effect was selected, and the thing is quite lovely. The threading is given on the diagram, the different colors being indicated by various symbols.

It will be noted that over the broad middle stripe, and the narrow stripes on each side that show the pick-up figures, double threads are used. There are seven double threads in each of the narrow borders and twenty-five double threads in the middle stripe. These double threads, it will be observed, are all on the back harness.

To begin the weaving put in several plain tabby shots as a heading. One shed, which we will call the "A" shed, sinks the front harness and raises the back harness that carries all the double threads. The opposite shed, the "B" shed, sinks the back harness and raises the front harness that carries the background threads. Begin the "pick-up" weaving on the "B" shed by finding the middle pair of pattern threads and lifting them with the fingers so that the shuttle can go under them. Weave the

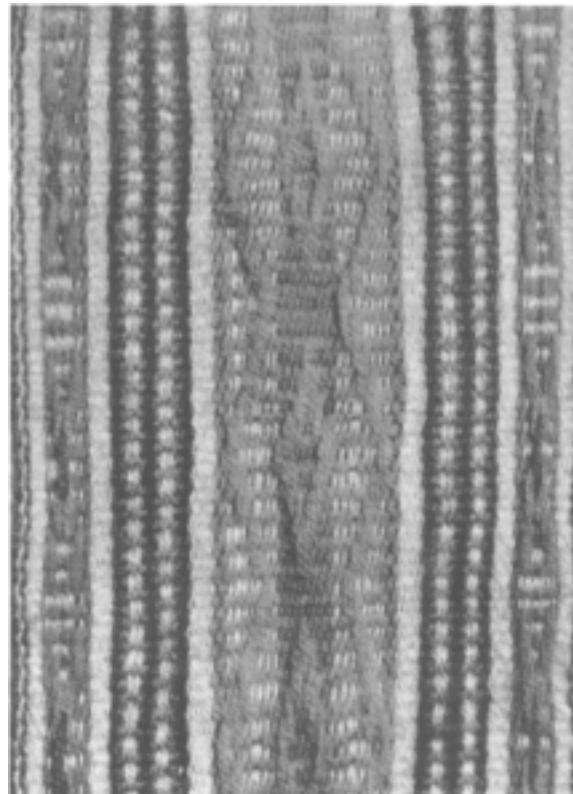
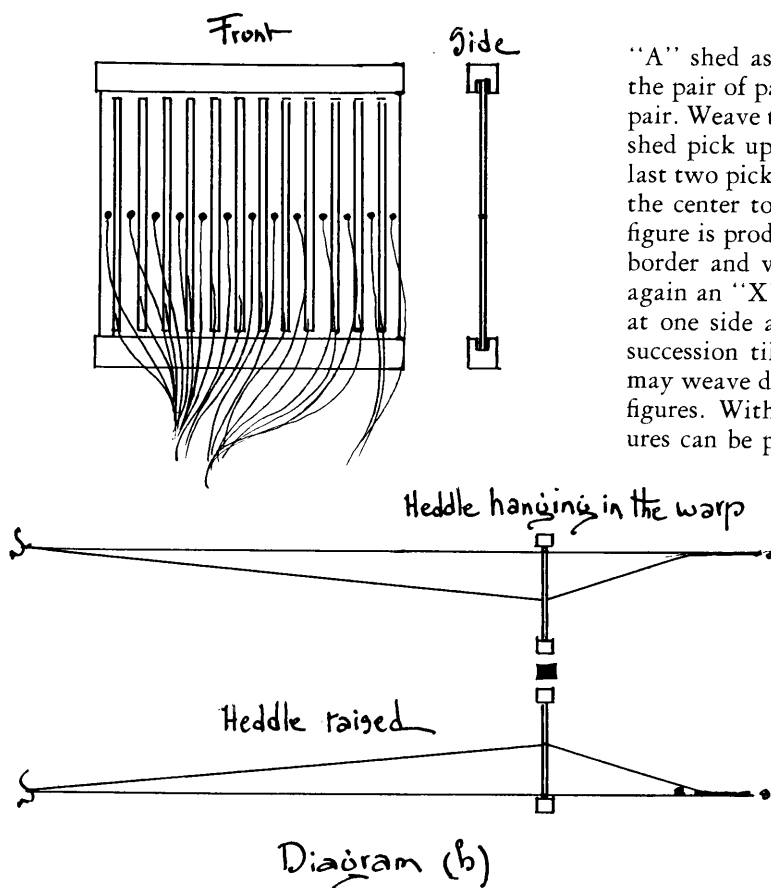


Illustration No. 3

"Swedish Heddle"



"A" shed as it is. On the next "B" shed pick up the pair of pattern threads on either side of the first pair. Weave the "A" shed as it is. On the next "B" shed pick up a pair of pattern threads next to the last two picked up. By continuing in this way from the center to the sides and back again a diamond figure is produced. By beginning at the sides of the border and working toward the middle and back again an "X" shaped figure is made. By beginning at one side and picking up the double threads in succession till the opposite border is reached one may weave diagonal stripes. These are the simplest figures. With a little practise quite elaborate figures can be produced in this way; one may weave initials, tree- and flower-forms, what one will. This work is easier and goes far more rapidly than seems possible.

In the old days narrow fabrics in warp-face weave were often made on the odd little contrivance known as a "lap-loom," "Colonial garter-loom" or "Swedish heddle." Illustration No. 4 shows a woolen scarf with pick-up figures similar to No. 3 in process of weaving on one of these little looms.

As it is amusing to weave on a

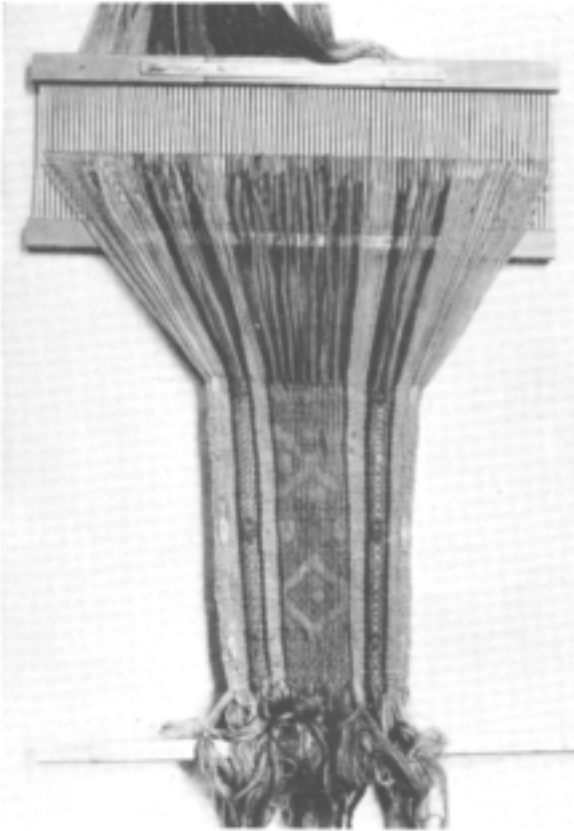


Illustration No. 4

Swedish heddle, and as readers of the Handicrafter may wish to try it, I am giving on the diagram a drawing showing the construction of the thing. Anyone with any experience in woodwork can make one of these little looms very easily indeed.

The wood selected should be a light, tough wood, not apt to split. A board about 6 inches wide, $3\frac{1}{16}$ " thick, will serve. The length of the board depends on the number of slats one plans to have, and on the width of the slats. These should be made as narrow as possible without danger of breakage, for if the heddle is made very long it will prove unwieldy. The one shown in the illustration has 96 slats with $1/16$ " slots between. These slots may be cut with a keyhole saw or may be sawed in from one edge of the board to within about an inch of the other edge. In either case a heavier strip of wood, grooved to take the edge of the board, should be glued along the top and bottom of the heddle for the sake of rigidity. A small hole should be bored in each slat at the exact center.

To thread the Swedish heddle draw the warp threads through the holes and slots alternately; all the threads shown on the lower row of the draft should be drawn through the holes and all the threads shown on the upper row of the draft through the slots.

To weave, attach one end of the warp to a hook in the wall or to any other stationary object and attach the opposite end to the weaver's chair. The tension of the warp may be regulated by pushing the chair forward or back as may be required.

The heddle is allowed to hang free on the warp. In this position it opens one of the sheds. The opposite shed is opened by raising the heddle with the hand.

The width of the weaving is not the width of the heddle — in fact the weaving is hardly ever more than half as wide as the heddle. The heddle is not used at all as a beater, but merely to change the sheds. Beating is done with a flat shuttle as noted above and the width of the work is regulated by the weft thread.

It will be noted that the middle stripe on which the pick-up pattern is woven has in Illustration 4 a different effect from the similar stripe in Illustration 3. It is threaded in a different manner as shown on the diagram, and in picking up the pattern a pair of threads is picked up on each shed, and not only on the "B" shed as in the other example.

The heddle shown in the illustration is as large as is practicable. Smaller heddles with half or even with only a third the number of slats can be used for much small weaving — belts, handles for bags, hat-bands, and the like. The whole affair — warp, heddle and all — can be rolled up and carried in a hand-bag.

While on the subject of small work in the warp-face weave a few words should be said about weaving fringes. The heading for a fringe may be set in warp-face weave, as wide or narrow as may be desired. Usually two such headings are set, one on either side of the loom, the space between being twice the width of the desired length of fringe. After weaving, the fringes are cut apart.

When woven with one shuttle the fringes are woven as follows: from right to left across the right hand heading only; from left to right across the right hand heading; from right to left all the way across both headings; from left to right across the left hand heading; from right to left across the left hand heading; a number of shots all the way across both headings. Repeat.

If a very heavy fringe is desired it is better to set one heading only and to have the material for the fringe at hand in cut lengths, twice the length of the desired fringe. Weaving is done with a small shuttle carrying a fine thread and the fringe material is laid in as close as desired. Heavy fringes may also be made with two headings and three shuttles, a small shuttle with fine thread for each heading and a shuttle carrying strands of the fringe material that pass across both headings at each throw. These methods of weaving fringes are sketched on the diagram.