

A PRIMITIVE WEAVE

By MARY M. ATWATER

In these days of destruction, when the whole civilized world seems to be breaking up around us into a chaos of blood and horror, we weavers can escape for a time into the world of our ancient art, that has lived through days as bad as ours, and will go on down the centuries for as long as there are fibres that can be twisted together and human hands to interlace them into fabrics, for the comfort and adornment of human life.

And in weaving there is pleasure and relief for many kinds of people — for those who enjoy the orderly monotony of tabby “yardage” as well as for those restless ones who must always be trying “something new”; for those who enjoy the ancient ways, and for those who must be ultra-modern with every breath.

For myself, I like all kinds of weaving, I believe — except bad weaving. And the thought that life will not be long enough to permit me to explore all the good kinds does not cause me pain; it simply gives me the delightful sensation of straying through a limitless garden full of the most varied kinds of beauty.

During the last few years I have taken much pleasure from certain primitive native American weavings that have come to my hands, — things from Mexico and Guatemala and Peru. I have been interested to discover how similar fabrics can be woven on our looms and for our purposes. There is an odd affinity between the bold and sometimes quite shocking designs of primitive art and the newest thing in “modernism”. Artistically speaking, we are today much closer to the most ancient styles of decoration than we are, for instance, to the fussy prettiness of late Renaissance. We find joy again in strong, hard lines, in bold masses, in unbalance, in exaggeration, in the grotesque, in sharp contrasts, in highly stylized and artificial rather than in naturalistic forms of art expression. To me all this seems magnificent and inspiring.

And among the primitive artists the native weavers of ancient Peru take very high rank. We do not know by what methods, or on what types of loom they produced their amazing fabrics, but that is after all a problem for the archeologists. For us the interesting thing is to find a technique for the making of similar weavings, adapted to the kinds of equipment we know how to use.

Some time ago I had the opportunity to examine an ancient Peruvian belt, decorated with very spirited and highly stylized and humorous animal figures woven in a warp-face technique. I greatly enjoyed weaving these figures, and perhaps some of the readers of the *WEAVER* will also find this amusing.

The original piece was quite narrow, and was probably made on a belt-loom similar to those used by the Navajo Indians. Many of the ancient decorative weavings are quite narrow — possibly because of the difficulty of weaving a wide piece on the primitive looms. For us it would probably be impossible to make a handsome fabric on looms such as used by the ancient weavers; civilization has made us much clumsier with our hands than the primitive craftsmen. But we have the advantage of better looms and we are not

limited to a width of a few inches. So if we like we can use this weave for such things as bags, table runners, pillow-tops, wall-panels and the like.

Just why so much primitive weaving is warp-face, while most of our Colonial and modern weaving is weft-face, I cannot say. Perhaps it is because of the difficulty of making the sheds on a primitive loom. Of course there many weft-face fabrics among the ancient Peruvian textiles, and some warp-face weaves fairly current among modern weavers, but most of the ancient native weaves I have studied are of the warp-face type.

In warp-face weaving the warp is set very close, so that the weft is almost, or completely, covered; and the patterns are produced in the warp instead of being woven in with the weft. It takes somewhat longer, of course, to set up a loom for warp-face weaving than for weft-face work; but this time-element is balanced by the fact that the weaving goes far more rapidly in warp-face weaving as the weft is usually coarse and only a few shots to the inch are required, and only one shuttle is used.

My Peruvian bit, done in the figures from the ancient belt, was warped in a wool-spun rayon in “natural” — somewhat coarser and harder than “Fabri” yarn — for the foundation fabric, with a coarse, hard-twisted, tapestry wool in black for the pattern. A No. 5 perle cotton might be used instead of the rayon for the foundation fabric if preferred. The narrower girdle shown in Illustration No. 3 was warped with Egyptian cotton 24/3 for the foundation and perle cotton No. 5 for the pattern. A hard-twisted wool, however, is better than a smooth cotton for the pattern warp as it gives a richer effect. The warp was made as follows: 8 threads natural, for the edge; 16 threads in bright red crepe silk as a border; then, for the body of the piece; 1 thread black pattern yarn and two threads fine natural, repeated 78 times, with the last pair of fine threads omitted. Then the red border again and the eight threads of natural for the edge. The ancient piece had 38 pattern threads only, but I wished to make my piece wide enough for pairs of animals, so I doubled this and allowed an additional pair of pattern threads to give a bit of space at the center.

The girdle in finer material was warped in the same manner except that a different border was used.

It is desirable to warp the pattern threads and the foundation warp to separate warp-beams, as the take-up of the two warps is different; but if the loom used does not happen to be equipped with two warp-beams a make-shift can be rigged up with little trouble. Beam the two warps together in the ordinary way. Then, when the pattern threads begin to grow slack, as they soon will in weaving, do this: raise the pattern warp by treading on treadle 3, and pass a stout stick — an old broom-handle will serve — under the raised threads, behind the heddles. Carry this stick down between the two warps to the bottom of the warp-beam and attach weights to each end of the stick, or — which seems to me better — make snitch-knot ties from the stick to the bottom of the loom. By drawing up the knots from time to time the tension of the pattern warp can be controlled.



Illustration No. 1



Illustration No. 2

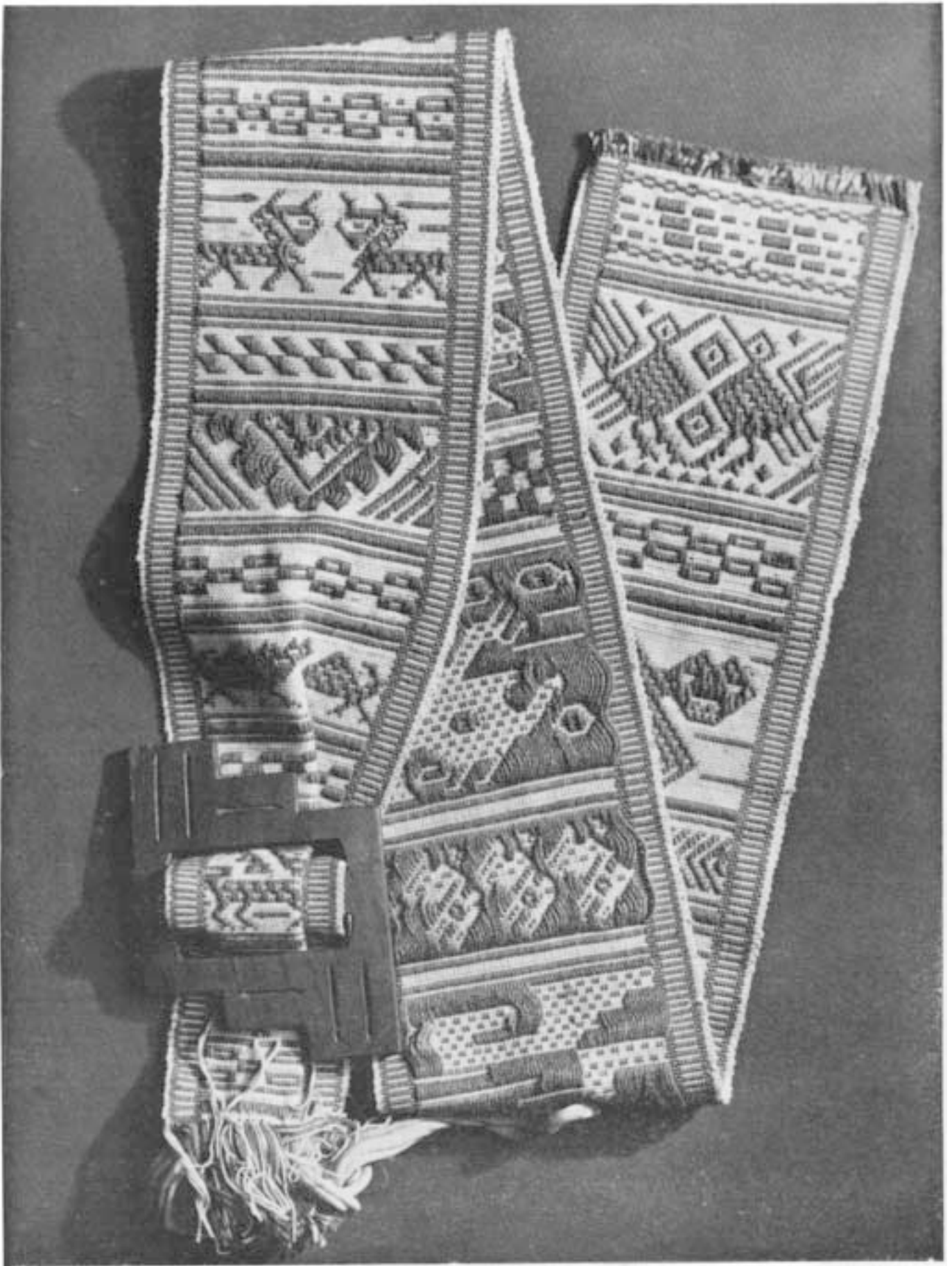


Illustration No. 3

A close-set warp of this kind should not be threaded through the heddles when beamed from the front of the loom. The sectional warping method is, of course, the most convenient way to make the warp, but failing the equipment use a raddle, or sley the warp through a coarse reed if no raddle is available, but do not draw in through the heddles till the warp is on the beam. Another practical suggestion: in beaming to a plain beam instead of winding lease sticks or a strip of ordinary paper with the warp, as is the usual practise, wind the warp over very heavy wrapping paper or a strip of corrugated paper such as comes around heavy parcels.

The threading is extremely simple, as shown on the diagram, only three harnesses being required. Sley through a coarse reed. I used a 6-dent reed for my wider piece, shown on Illustrations 1 and 2, with eight ends to the dent for the edges and borders and six ends to the dent for the body of the piece. A 12-dent reed might be used, with half as many ends to the dent, but the wear on the warp would be greater.

The tie-up is made to three treadles, as shown on the diagram.

For weft use a material coarser than the foundation warp. I used tufting cotton for part of my piece and a double strand of the natural rayon for the rest.

To weave plain white treadle 1 and 2 alternately for as many shots as may be required. For the dark stripes treadle 1-3, 2-3, for a narrow stripe and 1-3, 2-3, 1-3, 2-3 for the wider stripes.

To make the figures treadle on 3, which raises all the pattern warp, and take up on a pick-up stick the threads required for the figure. The narrow pick-up stick used for the Finnweave is ideal for the purpose. Let treadle 3 go and treadle on 1, allowing the pick-up stick to ride on top of the shed. Weave, being careful to pass the shuttle under the stick, which should be pushed back close to the reed. Use a flat "poke-shuttle" in weaving and beat with this shuttle in the shed. Leave the pick-up stick in place and treadle on 2; weave a second shot. Now take out the pick-up stick, treadle on 3 and make the pick-up for the second line of the figure. For instance, for the small geometric border at the bottom of Illustration No. 1 pick up the first 13 pattern threads, skip 13, pick up 13 and so all across. Weave 1 and then 2 under the stick as described. For the second row of the pattern, pick up 3, skip 7, pick up 3, skip 3, pick up 7, skip 3, and repeat all across. The third row in the figure is exactly like the first. For the fourth row skip 13 and pick up 13 all across. And so on.

Always weave two shots of weft under each pick-up.

The figures used for the piece shown in Illustrations 1 and 2 are given on square paper on the diagram, and can be followed without difficulty. Space does not permit giving all the figures woven into the piece shown in Illustration No. 3, but for most people it will not be difficult to draw these figures on cross-section paper, in the manner of those shown on the diagram, and original figures may be designed in a similar manner. Avoid very long skips as much as possible.

Illustration No. 4 shows a Mexican piece done in this same technique. The foundation warp is a fine cotton — a 20/2 unmercerized — threaded double, and a coarse two-ply wool yarn for the pattern warp. The foundation warp is in natural, with stripes of blue; the broad center stripe of pattern is in green with two narrow stripes of pattern — one in dark red and one in orange, — on either side.

The color effect of this piece is not, in my opinion, particularly pleasing. In setting up this weave at some of our summer "institutes" we used different colors with much handsomer results. However, here is the warping plan of this piece as it is — any other colors may be used as desired:

Edge: 6 double ends, natural, fine cotton
20 double ends, blue, fine cotton
6 double ends, natural, fine cotton

First pattern stripe:

1 end coarse wool, orange; 2 double ends natural, fine cotton, repeat 16 times.

Plain weave stripes:

6 double ends, natural, fine cotton
4 double ends, blue, fine cotton
8 double ends, natural, fine cotton
4 double ends, blue, fine cotton
6 double ends, natural, fine cotton

Second pattern stripe:

1 end coarse wool, dark red; 2 double ends natural, fine cotton repeat 8 times.

Repeat plain weave stripes.

Center stripe:

1 end coarse wool, green; 2 double ends natural, fine cotton, repeat 50 times.

Repeat plain weave stripes

Repeat second pattern stripe

Repeat plain weave stripes

Repeat first pattern stripe

Repeat edge.

If preferred, single ends of No. 5 perle cotton may be used for the foundation warp, with a coarse knitting wool for the pattern. Thread in the same manner as for the Peruvian piece, with all the fine warp on harnesses 1 and 2, and the pattern ends on harness 3. Sley through an 8-dent reed with four double ends to the dent for the edge and plain weave stripes and with two double ends of foundation warp and one pattern thread to the dent across the pattern stripes.

Treadle and weave exactly as described for the Peruvian piece. The pattern can be followed readily from the diagram.

For a wider piece than the one illustrated, make the pattern stripes wider, or make more of them, or make the plain weave stripes wider. I believe a very handsome coverlet for a Spanish type bedroom could be made of two 20" lengthwise bands of this weaving set between bands in plain tabby weave. However for a large project and a long warp it would be advisable to install a second warp-beam and warp the foundation and pattern warps separately.

The technique described is the simplest — though not the easiest to weave — of the primitive warp-face weaves I have studied, and in some ways it is the most amusing and effective. However the fabric produced is a purely decorative fabric, and because of the long skips is not suitable for upholstery or for any fabric designed for hard wear and friction. It has its uses though. A number of people have told me that they enjoyed this weave more than any other at the summer institutes. If it proves of interest to readers of the **WEAVER** other weaves of this order may follow.

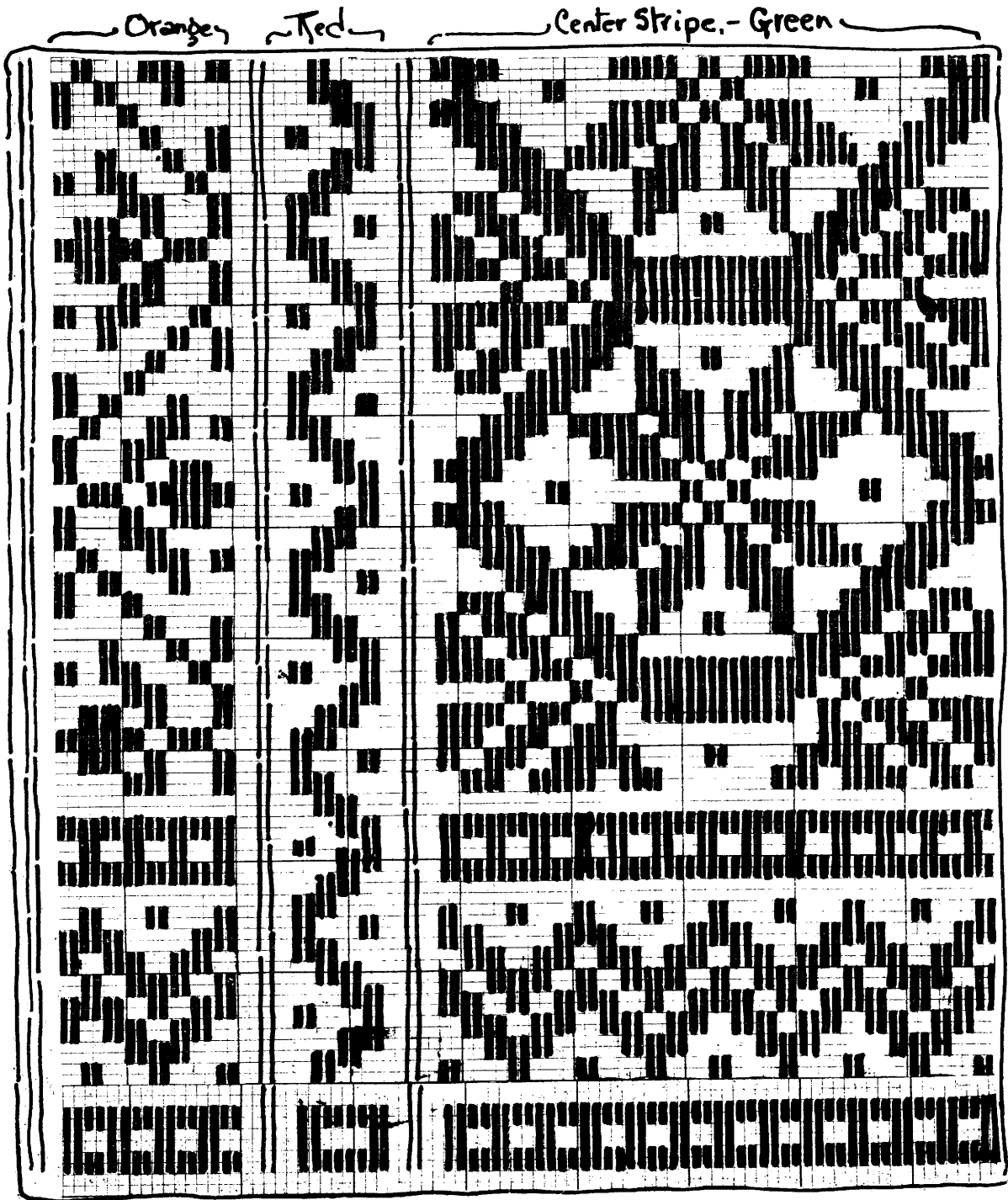


Illustration No. 4

Diagram (b)

Pattern of the Mexican piece in Illustration No. 4—

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M.M. Atwater 1941