By MARY MEIGS ATWATER

TAPESTRY RUGS IN AN ANCIENT PERUVIAN DESIGN

(Reprinted from the Shuttle Craft Bulletin, March 1941)

Among some colored-plates of ancient Peruvian textiles I came across a piece that seemed to me remarkably beautiful. The piece appears to be a bag, but whether a large or small one it is impossible to say. The weave is an odd form of tapestry I have noted in some few other Peruvian pieces, and also in the "marriage girdles" from Guatemala. Curiously enough it is similar to the technique used in much ancient Coptic weaving. And there is a vaguely Egyptian effect in the pattern of the Peruvian piece that so charmed me. It makes one wonder what possible connection there could have been between ancient Egypt and the American continent. But that is a problem for ethnologists rather than weavers.

Though the form of the pattern in the Peruvian piece suggests Egypt, the color pattern does not—and it is this extremely subtle and far from simple color arrangement that gives the piece its remarkable effect. I am unable to analyze the charm of this color pattern; it is almost as though there were something occult and meaningful about. it. It gives one a strangely happy and satisfied feeling. I tried the pattern in other colors, and in a different arrangement of colors, and found that much of the exhilerating sensation was lost. Perhaps just these colors in just this arrangement have some inherent mathematical affinity with the pattern. It is one of those things that one feels and knows without being able to give the reasons.

The colors themselves are neither brilliant nor exciting: a deep blue—not the purplish blue we know as "navy," but a cool, dark blue—; a deep, dull red a little lighter in value than the blue; an ocherish golden yellow; a dull, lightish blue about the shade sometimes called Wedgewood; and a warm, natural white.

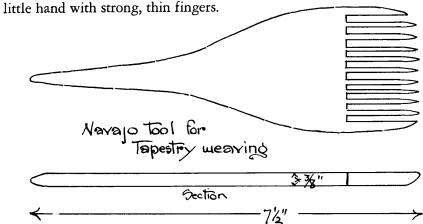
It is the arrangement of the colors in the weave that is of chief interest. I have laid out the design on the diagram, and have indicated the colors by hatching, and I suggest that those who are interested may lay in the colors on this diagram with crayon and so get an idea of the effect. This color pattern, though it looks simple at first glance, is quite intricate, and far more subtle than anything I have seen in modern design—or in the colorings of ancient Egypt. We are apt to think of the Ancient Peruvian Indians as primitive and

simple people. Primitive in many ways they undoubtedly were, but this interesting color pattern seems to show that as artists they were anything but simple.

The peculiarity of the weave is that the weft does not everywhere run straight across the warp, but that in the arcs and inverted arcs of the pattern the weft follows the contour of the figure. I have indicated this on the diagram.

I tried the thing in various materials, and with large figures and small figures. I was fascinated by it and could not let it alone, though I had other pressing work that should have been occupying my time. The pieces I liked best were a small rug done in wool rug yarns, and a chair-seat done in "raw" silk, both with large, bold figures. I also made a piece in the new Lily cotton rug yarn (Articles 814 and 1014) that was very nice indeed. For the rugs I wove deep end sections in the tapestry weave, with plain center sections done in the dark blue of the pattern.

For warp I used ordinary carpet warp at fifteen ends to the inch and threaded with three ends to the heddle, giving the same effect as a very coarse warp set at five ends to the inch. A coarse linen would make an excellent warp. To press the weft firmly together I used a little wooden tool such as the Navajo weavers use for their rugs. For those who may wish to make one for themselves, I have given a sketch. It is similar, of course, to the comb used in other types of tapestry weaving, but is larger and heavier. It is a delightful tool, like a little hand with strong thin fingers.



It will be noted that the pattern resolves itself into a series of horizontal bands, each composed of a row of small pyramids covered by larger pyramids or arcs, with inverted arcs and pyramids between. After each of these bands is completed it is possible to beat with the batten of the loom and so level off the work. But in the weaving of each band one must depend on the comb for firmness. During weaving the warp should be kept stretched very tight indeed, so that the weft will not pull out of line, and the weft must be very slack so that it will beat together nicely. Small, flat "poke shuttles" are convenient.

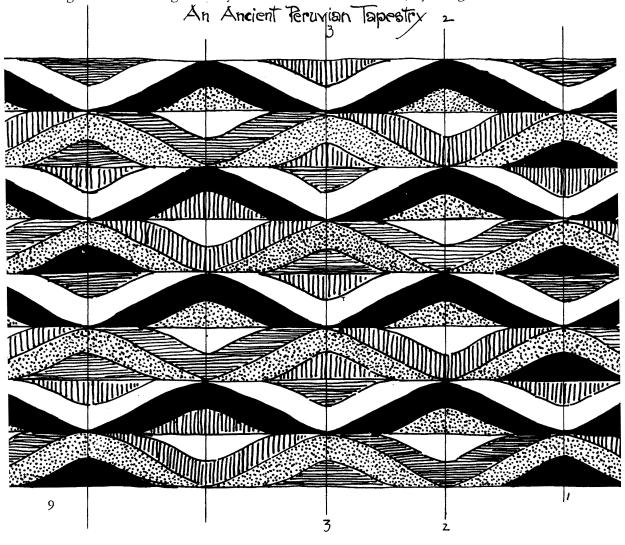
To make a small rug, as I made mine, warp 363 ends of carpet warp and thread three threads to the heddle. The threading may be made on two harnesses

or in twill or on any pattern that produces the two tabby sheds. This gives a width of twenty-four inches in the reed. Considering each group of three warp ends as a single end of warp, count off thirty ends from the right-hand margin and mark the thirty-first with a crayon. This will be the center of the first figure. Count thirty more and mark the thirty-first. This should be the center of the second figure, and of the rug. Count off thirty again and mark the thirty-first. There should be thirty ends remaining to the left-hand margin. The ruled lines on the diagram numbered 1, 2, 3, represent these markings. If desired the three groups of threads corresponding to these markings might be warped in a different color from the in a different color from the rest of the warp. The warp does not show in the result and the markings are useful in keeping the figures correctly centered.

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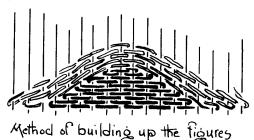
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To begin the figure, count thirteen each way from the first marked warp **and Med** end. This will be the base of one of the pyramid figures in the first row. For the other—there are only two in this arrangement—count off thirteen ends on either side of the end marked 3. Build up the pyramid figures by weaving back and forth, missing a warp-end on each shot as you go. This is shown on the diagram. The two figures may be woven at the same time, by using two shut-



tles, or one may build up one figure completely and then go to the next. I tried both methods and found that the second suited me the better, but it is a matter of personal convenience.

When the two pyramids are complete, weave the two arcs above them, as indicated on the diagram. The weft now follows the contour of the pyramid, taking in one additional warp-end on each shot. Continue this till you come within three warp ends of the center marked strand.



When the two arcs are complete weave the inverted arc at the center, and halves of the inverted arcs at each side. To weave the inverted arc at the center, begin at the fourth warp end counting from marked end 1, and take the weft as far as the fourth end from the end marked 3, crowding the weft down into the space with the comb. Continue, omitting one warp end on each shot till you have taken up thirteen warp ends on either side. This should leave you twenty-seven unwoven ends at the center. In this unwoven space build up the inverted pyramid. This may be woven in the same manner as the arc, but I find it better to begin at the bottom, in the center of the space, carrying the weft straight across, in the manner of the first row of pyramids, as this seems to keep the warp in better order.

When the inverted pyramid at the center, and the halves of inverted pyramids at the sides, have been completed, the weaving should make a straight line across, and the first row of the pattern is complete. One may then beat firmly with the batten.

Each row of the pattern is woven in the same manner.

The arrangement suggested does not include the complete repeat of the pattern. For a wider rug simply put in additional figures. The diagram shows the repeat, and of course the pattern may be carried for any width desired.

The pattern and weave of this piece are extremely simple, as will be seen. It is the amazing complexity of the color-pattern that gives it its distinction. For a sun-porch or morning room I cannot think of anything more striking and delightful than chair-seats and cushions in this fascinating weave, with a rug or rugs as described, and with window draperies in plain natural white with borders in this weave.

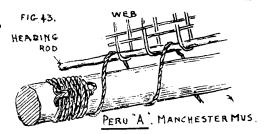
A knitting bag done in "raw" silks in this weave would also be a very satisfactory possession. Such a bag should be finished in the Peruvian manner,

with a braid over the edges and a braided cord for handles. A conventional wooden mounting would seem hardly appropriate. For these braids the weft material used in making the pattern should of course be used.

If one preferred a lighter weight fabric than that produced by the coarse weave as described one might use finer materials and a closer warp setting. However the large, bold figures seem to me more beautiful than the effect of the weave in small form.

Like so much ancient Peruvian weaving, the effect of this pattern is quite "modernistic" and so is entirely suitable for use with furniture of the modern type. It would be sadly out of place in a Colonial setting of "early pine" and "Whig Rose." It is not Spanish, but in a room done in the Spanish style it would be not inappropriate. We are accustomed to a mingling of Spanish and "native" American, naturally enough.

"Studies in Primitive Looms" by H. Ling Roth Bankfield Museum, Halifax.



A Postscript from Harriet Tidball:

The cover photograph is of Mrs Atwater's chair-seat piece, described here. The warp is as given: three ends of carpet warp used together, but take-up has given a final set of six per inch. Weft is heavy raw silk in beautiful colors—a beautiful material which I have not seen available for about twenty years. Obviously because she did not have the correct shade of blue in the silk, Mrs Atwater has used Lily medium blue in the 20/6 soft twist (no longer available) which is slightly finer than the silk. Oddly enough, this combination of the dull, soft cotton for one-fifth of the total areas, with the beautiful glossy silk, seems to add richness to the total effect. On the photograph, the rich red shows hardly lighter than the dark blue, and the gold and medium blue have about the same values but differ in texture.

This particular design as given by Mrs Atwater has been selected to give the working introduction to the series of articles on tapestry, because it seems an ideal introduction for the weaver who wishes to learn to weave tapestry techniques but has had no previous experience. From this interesting technique one can learn how to build up individual areas of color from different ends of yarn, and develop the needed sensitivity to the correct warp and weft tensions and the use of the tapestry comb, without being confronted by the difficult problems of vertical and diagonal color boundaries or the many methods for interlocking and dovetailing weft. Greater skill is developed through taking up the various techniques one at a time.