

ILLUSTRATION NO. 1

Genuine Navajo Rug woven on such a loom as shown in Figure 1

of the Little Colorado River waiting for the water to go down enough so we could cross it. I put in most of my time watching the weavers, and only through the help of the trader and by making friends with children was I permitted to do this. The children go to school and speak English, while the elders do not or will not. By asking questions of the children I learned some of the methods of weaving and how to set up a loom. I bought blankets and a small loom. At home I took one of the blankets apart piece by piece and rewove it on my foot-power loom. It was tedious work, but I learned something.

A Navajo weaver has to make a loom each time she wishes to weave a piece. She first drives two long stakes in the ground as far apart as the rug is to be long, and then walks around and around these stakes putting on enough warp to make the desired width and only enough for the rug in mind.

Two upright poles are then set in the ground and crosspieces tied near the top and bottom, making a frame a little larger than the rug contemplated. From the crosspiece a smaller stick is suspended by a zigzag rope just as we attach our warp to the cloth beam. Another stick is attached to the lower crossbeam in like manner. The two sticks on which the warp has been made up are now hung on the frame. The weaver slips a strong cord underneath the first loop of warp on the makeup stick and over the suspended stick. She throws a loop over the stick and pulls the warp to the bottom of it, picks up the next loop and continues until all the warp is attached, spaces it evenly and then removes the warp stick. She repeats this at the bottom, and tightens the zigzag ropes for the proper tension.

For a heddle stick she chooses one a little longer than the width of the rug, attaches a long string to one end of it, then picks up the first warp, makes a loop around it and another around the stick, and picks up the third warp. Thus she goes across the warp picking up every other thread until the heddle is completed. She then adjusts the

length of the loops to make an even shed. To make the shed the weaver pulls this stick toward her just far enough to allow the passage of a wooden sword or knife; to hold the shed open she turns the sword on edge and then slips the filler through with her fingers. The Navajo weaver uses no shuttles, just has her yarn in small bunches and uses her fingers to put in all those complicated designs. She may sometimes use a long stick with a bunch of yarn on the end to make a throw the full width of the rug.

Navajo Weaving with Two- or Four-Harness Looms

BY ELLIS PRENTICE COLE

THIS is how I came to learn the Navajo (Nava-ho) weaving: To secure material for my lectures in the public schools, I was sent out to Arizona to study the Indian customs and mode of life and to get pictures for publication purposes. The Indians are difficult to approach and they do not like a camera, so I got a bad start. Up in the Navajo country our guide lost the trail and we were four days without water. Then we got so much of it the dry gullies were turned into raging torrents. I spent three weeks on the bank

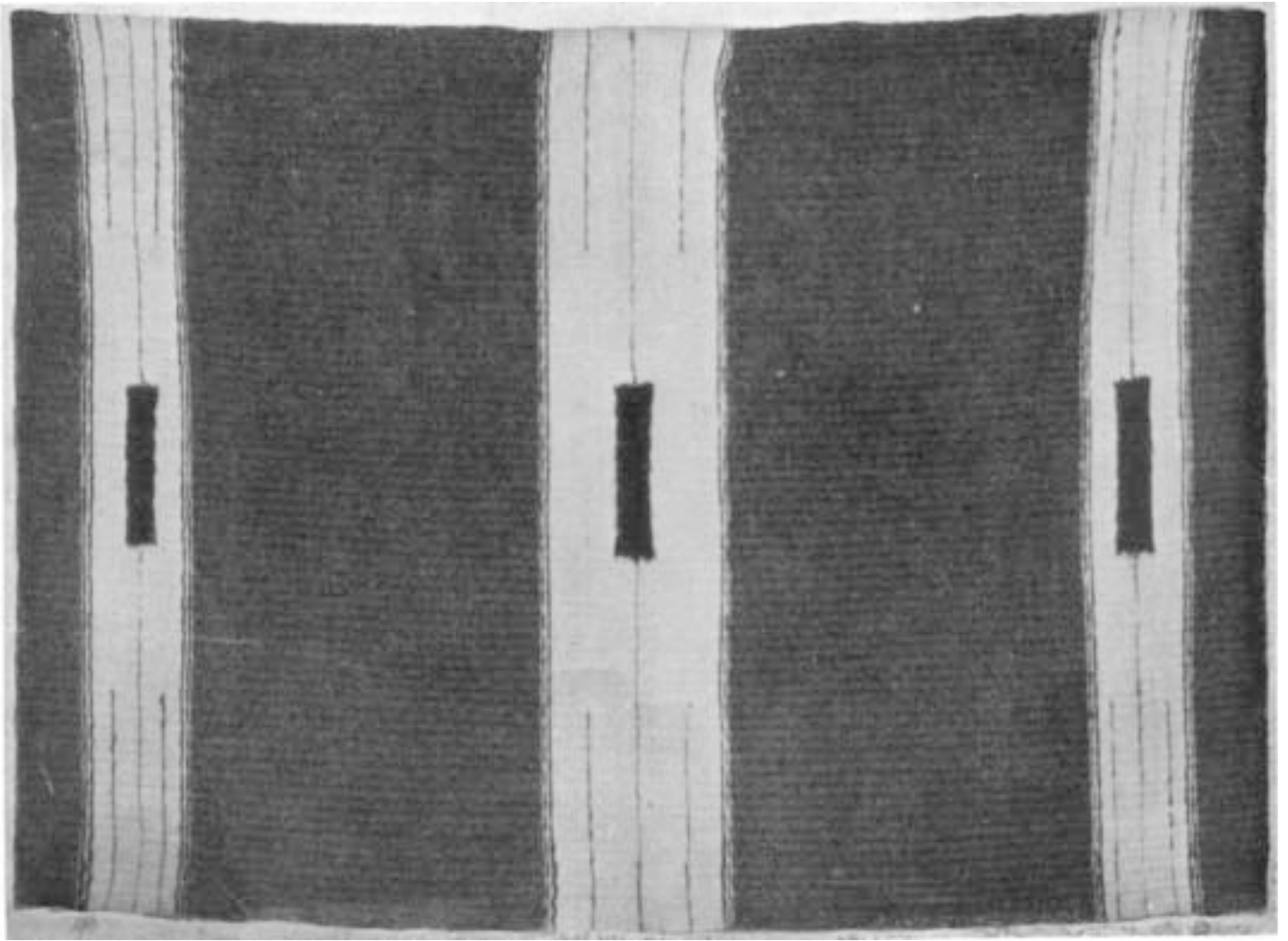


ILLUSTRATION NO. 2

Cloth woven by the author on a four-harness loom in the Navajo method; to be used for a sports jacket

For a beater she uses a wooden fork the tines of which match the spacing of the warp, and for long throws she uses the sword, which has one edge quite sharp, and pulls down on it until the warp is entirely buried. Putting in the designs she will make a shed of just the number of warps to be used in that color, then go on with the next color until she has completed the row all the way across, beat it all in and then open the next shed. The more complicated the design, the more pieces of yarn it takes to complete a throw. That is what takes the time and the patience and makes this style of weaving prohibitive for those of us who have other things to do besides weaving. (See Figure 1.)

Still, we can make "Navajo" rugs, blankets and ceremonial cloth on our own looms that cannot be told from the Indian weaving except that it will be more evenly done than can be accomplished in their primitive way. In making designs for their rugs the Navajo has but four directions for the outlines; parallel or across the warp as in stripes, upright or at right angles to this, and diagonal in two directions. There are no curved lines used. (See Figure 2.)

In making perpendicular edges to a design the weaver stops at a certain warp, opens the next shed and goes back around this warp. For the next section of the throw she goes around this same warp. (See Figure 3.) The Egyptians pick

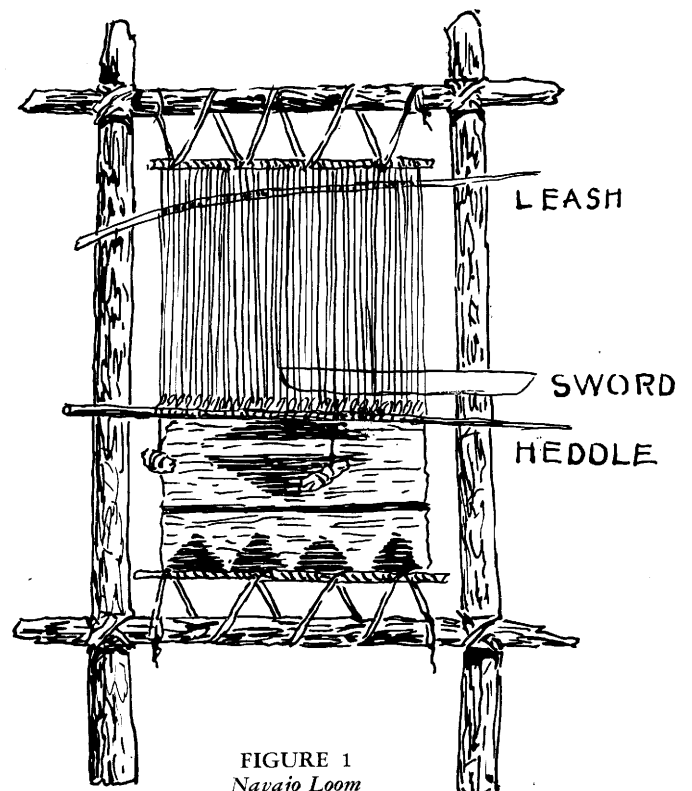


FIGURE 1
Navajo Loom

THE WEAVER

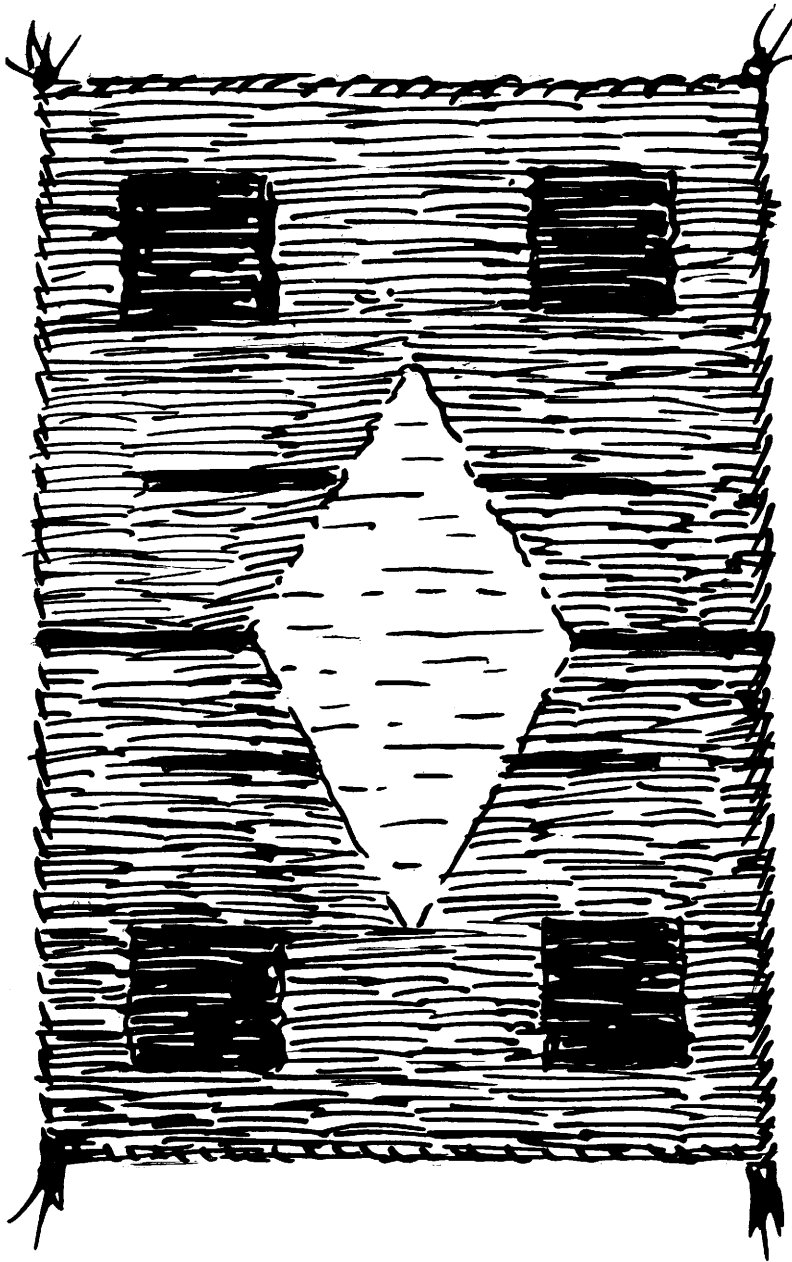


FIGURE 2
Simple Navajo design, easy to weave on two- or four-harness hand- or foot-power loom

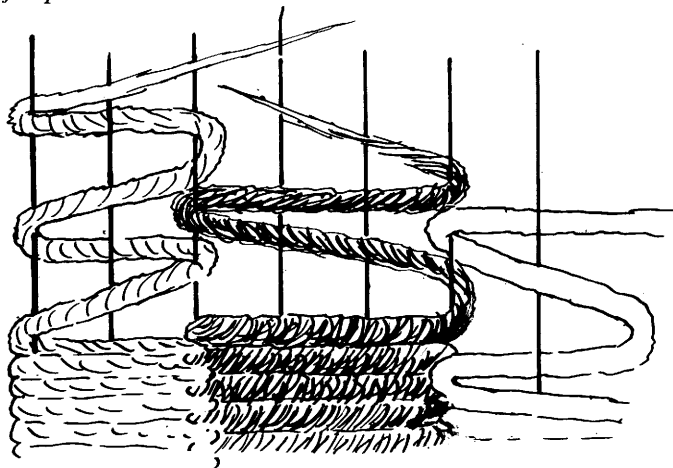


FIGURE 3
Method of putting in designs used by the Navajo weavers, and easily done on any loom

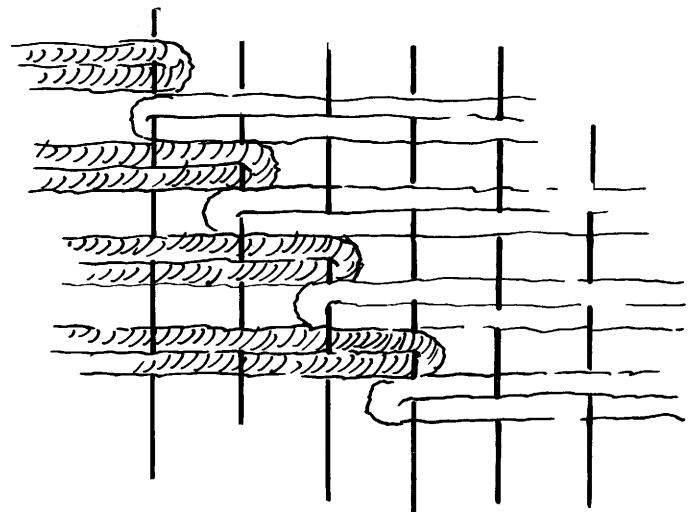


FIGURE 4
Manner of making oblique edges on designs

up the next warp, but that leaves a hole through the rug, while a Navajo rug, when well beaten up, will hold water.

For the diagonal lines the weaver picks up an additional warp each time going in one direction, and drops one going in the other. (See Figure 4.) The beating will crush the yarn together and the warp will not show at all. One secret in covering the warp is to have the warps farther apart than in regular tabby weaving; using soft spun yarns also aids, and if necessary the sword may be used to pull the filler up tightly.

Now let's put a Navajo on our own loom. Use cotton or wool warp, 3, 4, or 6 to the inch. This may be double-slayered for strength, or to give a rep effect. Barnet rug wool makes a heavy rug and, for lighter cloth, Peasant or homespun may be used. The Indians had few colors until German-town yarn came to them, and how they did revel in it. We may use a fringe on our Navajo, but it will have a more real look if it is started with a warp headband and bound or overstitched with a piece of the yarn used. The sides of selvage may have a stout cord twisted in as we go along.

Choose a simple design for your first one unless you have had considerable experience in finger weaving. Much time can be gained by using spool shuttles wherever possible and the flat shuttles for the smaller patches. The Navajo weaver frays out the ends of her yarn at the beginning of a design and blends it into the same shed, or matches it in if a new piece has to be added, before the design is completed, also at the finish of a design. This is a good trick to use in all weaving. Theoretically the yarn should be frayed to about half its size where it goes around the outside warp, to prevent bulging and an uneven selvage. Be very careful not to draw the filler tight, as there is every tendency in this style of weaving to narrow rapidly as it proceeds.

If the pictures and drawings do not give you a complete understanding of this kind of weaving, the writer will be glad to reply to any letters received.