

handicrafter

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Double Weaving on Four Harnesses— the “Finnweave”

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AMONG the ancient forms of hand-weaving being revived in our day one of the most remarkable is a method of weaving double cloth in very free and interesting patterns on the ordinary four-harness loom. The process is extremely ingenious and not difficult, and the old-time weaver who devised it deserves a place in the weavers' Hall of Fame, but his name—like the names of so many heroes of our craft, has been lost in the “backward and abysm of time.”

The weave is a national weave of Finland but is well known in other Scandinavian countries, is taught in Swedish schools of weaving, and is described in Swedish weaving books. In this country, however, it appears to be little known, and it is hoped that the following notes, describing the weave for American weavers, may prove of value.

The fabric produced is a true “double-plain”—two tabby fabrics of different colors, one above the other, not interwoven but interlaced along the edges of the pattern figures. The pattern appears light on a dark ground on one side of the fabric and dark on a light ground on the reverse. Exactly like the fabric of the old American Colonial double-woven coverlets. That this type of fabric can be produced on four harnesses—and in far more elaborate patterns than are possible on any practicable number of harnesses by either the Swedish or English methods of double-plain weaving,—seems almost miraculous, but there it is!

The ancient pieces of Finnish weaving illustrated in the Scandinavian books—I have, alas! never visited Finland so have not seen these marvels with my own eyes—show spirited figures of fabulous birds and beasts, flowers, trees, buildings, ships, human beings, religious symbols, inscriptions and dates. One of these ancient pieces is shown in Illustration No. 1. In a general way, any pattern that can

be designed on squared paper may be produced in this weave. The only limitation being that the process is not adapted to the use of many colors; a two-tone effect is best, though three colors might be used in a simple pattern as in the old American Colonial red-white-and-blue coverlets. Patterns designed for cross-stitch embroidery, for filet, or for Spanish open-work weave may be used for Finnweave without difficulty.

Of course the Finnweave is slower than ordinary over-shot weaving. It is, however, not nearly as slow as any form of tapestry or embroidery weaving, and with practise considerable speed may be attained.

The best loom to use for the Finnweave is the familiar four-harness counterbalanced loom, though the thing can also be done on a jack-type loom, such as the Structo or the MacKay loom. In addition to the loom some simple special equipment is required. This consists of three sticks: a round stick about half an inch in diameter; a flat, pointed pattern stick about an inch wide; a shed-stick similar to the pattern stick but twice as wide. These sticks should be six to eight inches longer than the width of the warp in the reed.

To manipulate the long sticks required for a wide piece of work is somewhat awkward till one acquires skill, and it is therefore wise to begin with a small piece—a bag, a chair-seat, a top for a foot-stool, a narrow runner for the radio.

The yarns used for Finnweave should be very strong, hard-twisted and smooth. Very fine materials should not be attempted. The warp is subjected to special strains that no soft or fuzzy yarn would stand. Two kinds of material may be used together, as wool and cotton or wool and linen, but care must be taken to select yarns of exactly the same grist. The same material is used for both warp and weft.

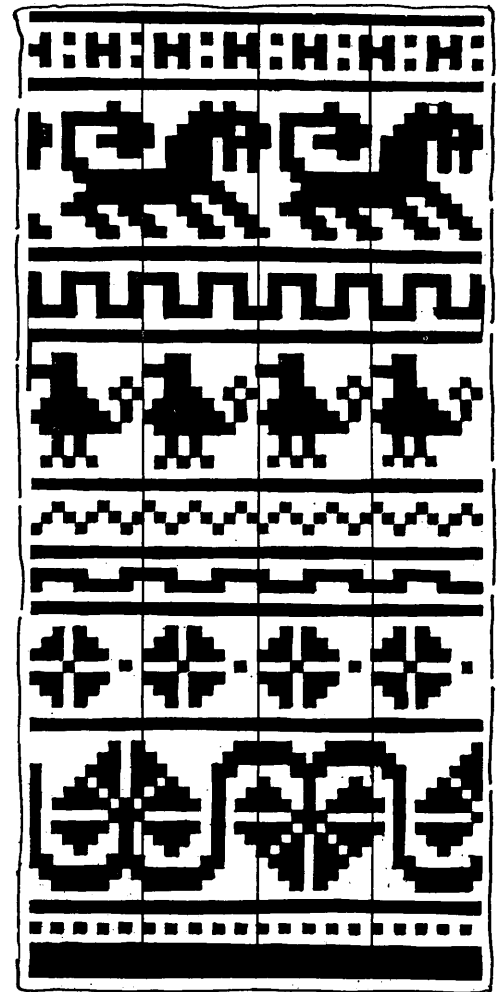


ILLUSTRATION NO. 2
A variety of simple borders, Scandinavian

ILLUSTRATION NO. 1
"Finsketücke" from "Flamskäv och Finnväv" by
Maria Collin

The effectiveness of the patterns depends on the use of two colors, a light and a dark color. The warp is made of an equal number of ends of each color. If wool and cotton are used together separate warps may be made, beamed on separate beams, but except for a very long warp it is entirely practical to beam both materials on the same beam. If sectional warping is practised all the warp may be put on at the same time; if chain-warping is necessary it is advisable to make the wool and cotton warps separately but they may be beamed together.

The setting in the reed should be a good deal closer than for ordinary tabby weaving. It must be remembered that two fabrics are to be woven, and theoretically the setting should be twice as close as for ordinary weaving. In practise it need not be set quite as close as this. The warp may even be set only a little closer than a normal setting for the material used, and if the resulting fabrics appear too open the weaving may be done with a double strand. This is not, I hasten to say, the best practise, but as it simplifies the work a bit it might be used for first work in the style.

Threading and tie-up are shown at (a) of the accompanying diagram. On looms equipped with four treadles only, the "A" and "B" treadles may, of course, be omitted and these sheds made by weaving treadles 3-4 and 1-2. The tie-up, of course, is for a treadle loom; the method of weaving on a Structo loom will be explained later.

To weave a plain stripe all across the warp—dark color on top, light color underneath—proceed as follows: Open the "A" shed, which sinks all the light threads and raises all the dark threads. (On the Structo loom, levers 1-2. Insert the round stick through this shed, between the reed and the heddles. Now treadle 1. This sinks half the dark threads and raises the other half. Insert the shed-stick through this shed, above the round stick. Bring the shed stick close to the reed and set it on edge. Through this shed throw a shot of weft in the dark color. Take out the shed-stick; treadle 2, put in the shed-stick as before and weave a second shot of dark weft. For a wide stripe repeat these two shots as required. To weave the light under-stripe, leaving the round stick in place treadle 3 and insert the shed-stick through the shed under the round stick.

Weave a shot of weft in the light color. In the same way treadle 4 and weave the return shot of light weft. Repeat for a wide stripe.

On the Structo loom it is unnecessary to use the round stick in weaving the plain stripes. Use levers 1 and 2 alternately for the dark weft, and levers 1-2-3 and 1-2-4 for the shots of light colored weft.

To weave the reverse stripe—light above and dark below—take out the round stick, open the "B" shed (levers 3-4 on the Structo loom) and insert the round stick behind the reed as before. Weave treadles 1 and 2 in the lower shed in dark weft and treadles 3 and 4 in the upper shed in light color. (On the Structo loom, levers 1-3-4 and 2-3-4 dark, levers 3 and 4 light.)

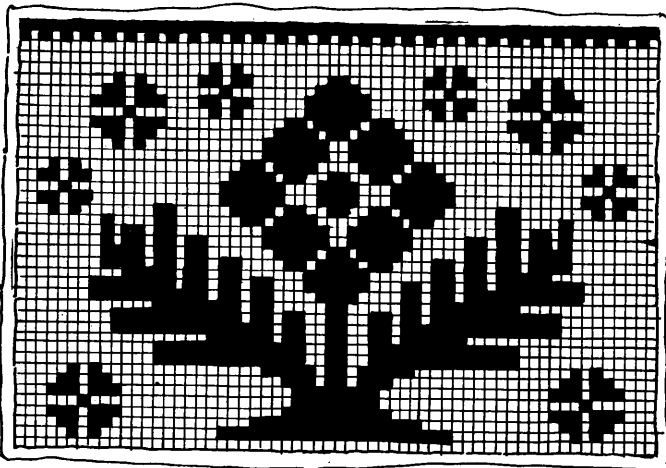
To weave the pattern,—step No. 1: Open the "A" shed (if the pattern is to appear dark on a light ground) and with the pointed pattern stick pick up the lowest line of the pattern, allowing two dark threads—or four, if a larger figure is desired. The stick should pass under the dark threads of the pattern and over all the others. Do this work in front of the reed. Set the pattern stick on edge and push it close to the woven fabric. Now open the "B" shed, and insert the round stick behind the reed under the cross that appears in the warp. This is step No. 2. These two steps are illustrated at (b) of the diagram. Now take out the pattern stick. Treadle 3, and through the shallow shed appearing directly above the round stick insert the shed-stick, as shown at (c) of the diagram (Step 3). Bring the shed-stick close to the reed and weave a shot of light weft. In the same manner weave a shot of light weft on treadle 4. If four threads instead of two were picked up for each square of the pattern, repeat these two shots. Now take out all the sticks and open the "B" shed. With the pattern stick pick up the background in front of the reed. Open the "A" shed and insert the round stick below the cross. Take out the pattern stick and with the shed-stick weave dark weft on treadles 1 and 2.

All this sounds far more complicated than it will be found in practise.

On the Structo loom, pick up the pattern and insert the round stick as described, but in making the sheds for the shed-stick use three levers each time: levers 1-3-4 and 2-3-4 for the dark shots and levers 1-2-3 and 1-2-4 for the light shots.

ILLUSTRATION No. 3

A simple Scandinavian motif, arranged for a bag



Weave the entire pattern in this manner, row by row, as shown on the drawing.

To consider in detail the weaving of the pattern arranged for a bag, Illustration No. 3: The pattern covers sixty squares in width and allowing four threads—two of each color—to each space, will require a warp of 240 ends; 120 ends light, 120 ends dark. A warp of No. 3 perle cotton

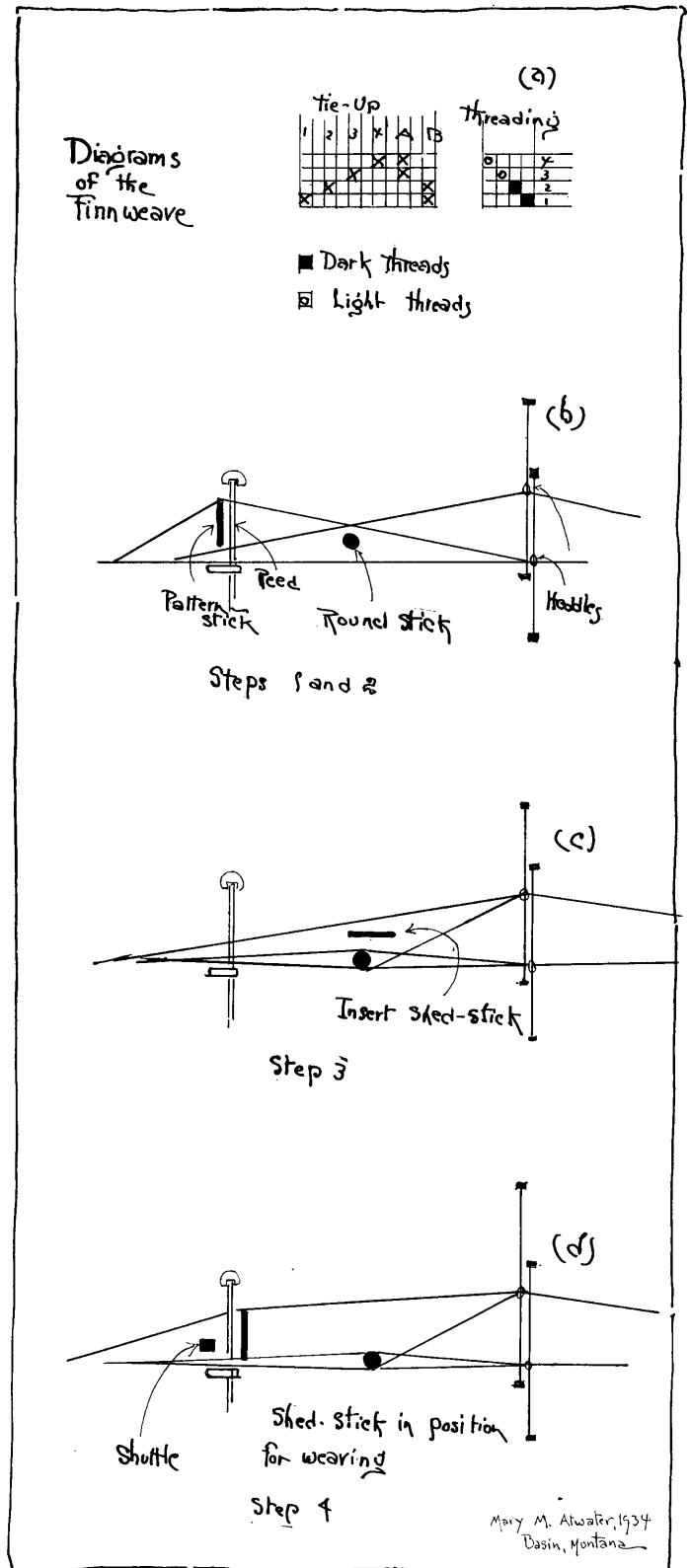


ILLUSTRATION No. 4

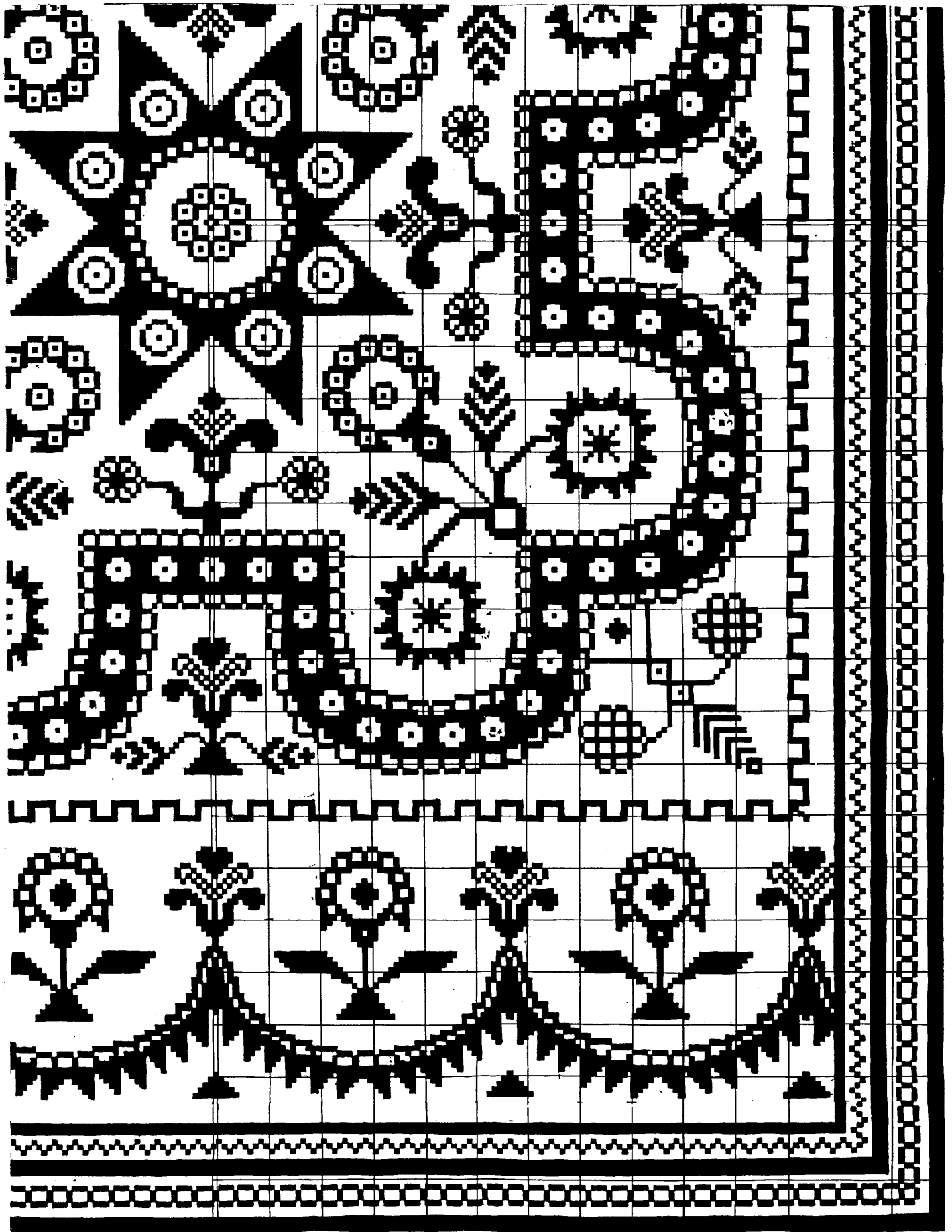


ILLUSTRATION No. 5. A coverlet pattern, American Colonial

in white and blue or white and red is suggested, at a setting of 20 ends to the inch.

Turn the pattern upside down for convenience, as of course the top row of the pattern will be for the top of the bag. Weave a narrow heading on treadles "A" and "B" and then weave a plain stripe, dark above and light underneath, as explained.

For the next row, on the "A" shed, pick up two and go over two dark threads all across the warp, using the pattern stick in front of the reed as described. The object of making a simple border is not altogether the decorative value. A row of single units woven as suggested serves to space the warp and makes it much easier later to pick up the correct threads for the more elaborate figures.

After weaving the single blocks weave a double stripe with light above and dark below.

The fifth row of the design is the first row of the pattern proper. On the "A" shed pick up the four single units that correspond to the start of the two small flowers on either side of the main figure. They are units 19, 21, 40 and 42 of the drawing. From this point it should be simple to continue through the design.

When the entire figure has been woven, turn the pattern right side up and weave in the same manner in reverse order back to the beginning.

On this drawing all the squares are ruled off. On the rest of the designs the ruling has been done at intervals of ten spaces.

The small borders shown on Illustration No. 2 may be used in various combinations for a narrow runner, or may

be used to frame a larger figure. The drawing is made on a width of forty spaces as indicated by the ruling.

Illustration No. 6 shows two of the motifs taken from the ancient Finnish piece shown on Illustration No. 1—arranged for weaving and slightly simplified. The trumpeter on his gallant steed is designed on a width of forty-five spaces, and a height of forty-three spaces. The woman is thirty-three spaces wide and forty-three spaces high.

For those who are ambitious to make a double-woven coverlet I have made the pattern shown as Illustration No. 5. This is an American Colonial pattern, arranged from the design of an ancient tufted bed-spread. It is designed for a coverlet in two strips, and the pattern is 141 spaces wide to the center. It is intended for a warp set at 30 ends to the inch, and eight threads, instead of four, for each pattern space. Material suggested: perle cotton No. 5, and Shetland yarn.

Other combinations of material suggested for the Finnweave: Germantown yarn and perle cotton No. 3, at a setting of 22 or 24 to the inch. Fabri yarn and No. 10 perle cotton, or Perugian cotton, or 40/3 linen, at a setting of 40 to the inch. Other materials that might be used for Finnweave are Linen floss, linen "weaver," Spanish knitting yarn. Homespun yarn—unless a very hard, strong quality—is not advised for this work.

In designing patterns for the Finnweave remember that the two fabrics of which it is constructed are entirely separate, and that very large plain stretches should be broken up with occasional small figures in order to keep the two fabrics together. Otherwise they would tend to a baggy effect.

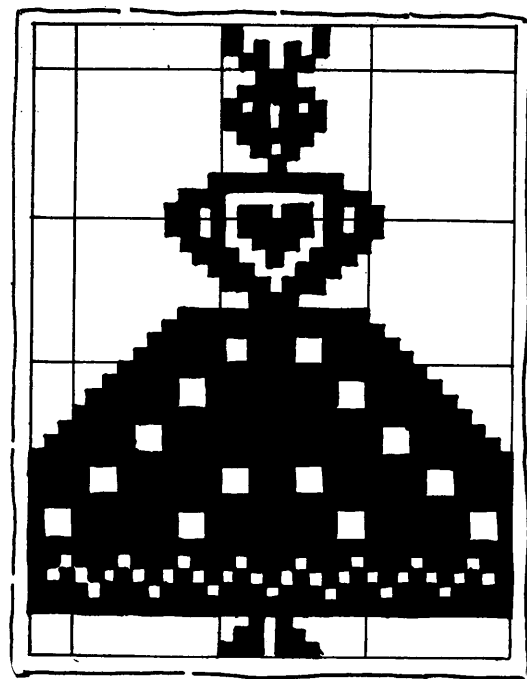
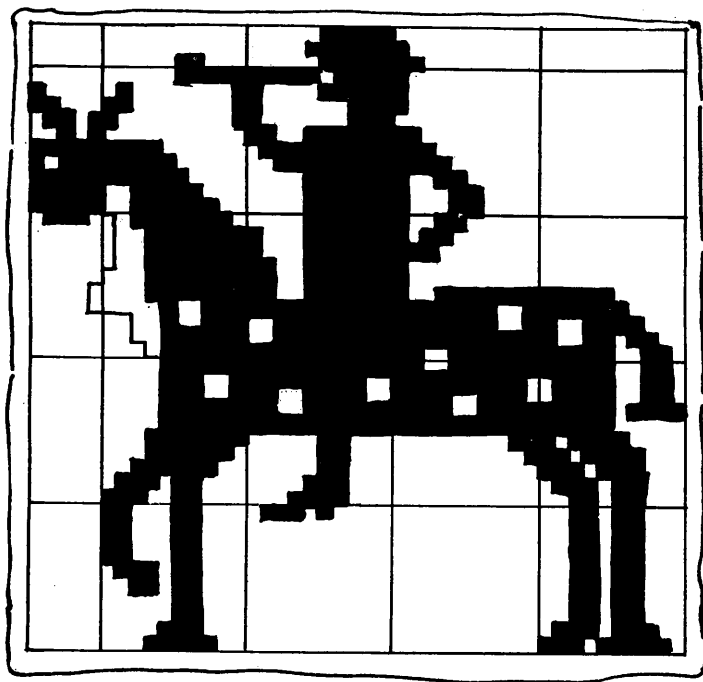


ILLUSTRATION No. 6

Two motifs — Trumpeter and Peasant Woman — from the ancient "Finsketache" (somewhat simplified)