

SUPPLEMENT TO THE *handicrafter*

Historical Background of Double Woven Cloth

BY NELLIE SARGENT JOHNSON

DOUBLE woven cloth, or fabric which consists of two distinct webs woven at the same time, joined together wherever the weaver chooses to alternate the colors of the cloth is a most interesting technique. That it is an extremely ancient form of weaving is evidenced by the fact that many of the old Peruvian fabrics show this same type of cloth. They are woven of dark brown and natural cotton, and were probably woven on a very simple belt loom with the use of shed sticks to form the pattern sheds. A typical Peruvian design, a bird figure with a fish in his mouth, taken from an actual fabric at the Detroit Institute of Arts, is shown in Illustration No. 1. This little pattern was used as a repeat design all over the fabric. These patterns are all very simple, and include geometric figures which represent fish, birds, the puma or cat, and figures of men as well as gods. Illustration

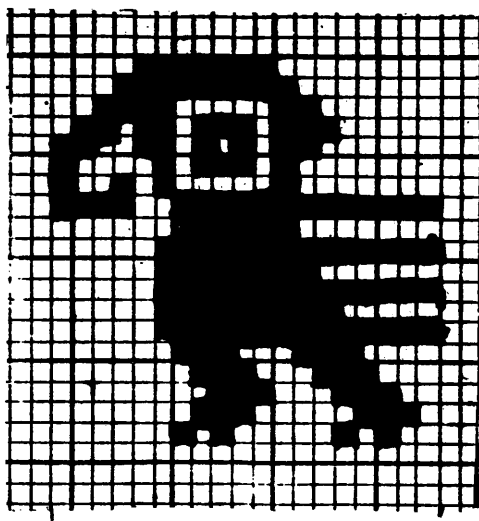


Illustration No. 1

No. 2 shows an interesting fish motive. The piece was woven of white silk and Bernat's kashmir wool in blue. The design was adapted to cross section paper from some of those given in a leaflet on Peruvian Art by Charles A. Mead, published by the American Museum of Natural History. This is from leaflet No. 46, and may be obtained from the Museum by anyone wishing a copy. Illustration No. 3 shows another bird design adapted to cross section paper from this same leaflet. Another interesting book showing many of these typical designs, in color plates, is "Ancient Peruvian Textiles," by R. and M. D'Harcourt.

The double weave is also found in silks of the 11th century attributed to Byzantium, as well as in silks of the 12th, 13th, and 14th centuries from Sicily, Italy and Persia. The small design at the bottom of Illustration No. 2 shows a very simple Italian pattern. The Persians of the 16th and 17th centuries were expert weavers of this technique. And there is a piece of Persian fabric, illustrating the story of

Mechoun and Leila, at Cooper Union in New York. And it is also shown by Errera in Catalogue d'Etoffes, No. 264. Great variety of color and intricacy of design is shown in the Persian silks of this very primitive weave.

This same type of double woven fabric was woven in Sweden at a very early date also, and several large rugs or wall hangings have been preserved from Bohuslan, northern Halland, Harjedalen, and Jamtland. In the churches of the last two named provinces are remains of wall hangings and borders. A large wall hanging from the church in Grodinge, in Sodermanland, is now in the Statens Historiska Museum at Stockholm. An illustration of this piece is given in Maria Collin's book, "Flamskvav och Finnkvav," and also two other pieces, as well as an enlarged detail of the weave. It was very interesting to note that in this book which

gives a description of the method of weaving this technique, just enough of the detail was omitted so that it was quite impossible to follow the directions given, even if you could get an adequate translation of the text. She names this method "Finnkvav." While "Svenska Statens Samlingar av Vavda Tapeter" by J. Bottiger states that "homespun, tow cloth and plain web, ryevev and ryssväv" were commonly woven on the royal estates during the first half of the 16th century. This author believes that the ryssväv, which is always in two or three colors, is the same as the double weave. In Bohuslan, it is in our times called "finskeväv" or Finnish weaving.

An old weaving book by J. E. Ekenmark written in 1820 gives instructions for a "pattern heddled" kind of double weaving, probably taken from English sources. These were used mainly for wall coverings, better class carpets, and English quiltings or "sticktyger." This summer while in Wisconsin, I saw a piece of very interesting Carpet in sev-



Illustration No. 2

eral colors woven after this method. Illustration No. 4 is an old blue and white coverlet dated 1830 in one corner, which belongs to one of my friends here in Detroit. It was woven in two strips 36" wide and seamed through the center. The pattern was very lovely. The fine detail was beautifully worked out and the whole coverlet was exceptionally well proportioned. We have been accustomed to think of this particular type of coverlet as having been woven on a "Jacquard" loom. And those coverlets which do *not* show any seam through the center, and woven at a later date probably were woven on the "Jacquard" loom. Illustration No. 6 is an interesting old piece which I purchased in Palmyra, N. Y. One warp is of alternate red and blue homespun wool, and the other is natural cotton threaded double. It is dated 1870, and because of the very many mistakes in the design and other irregularities, I am very sure it was woven on a four harness loom of the simplest type. It is of much coarser weave than the coverlet shown in Illustration No. 4, and was very likely woven by a home weaver rather than one of the old professional

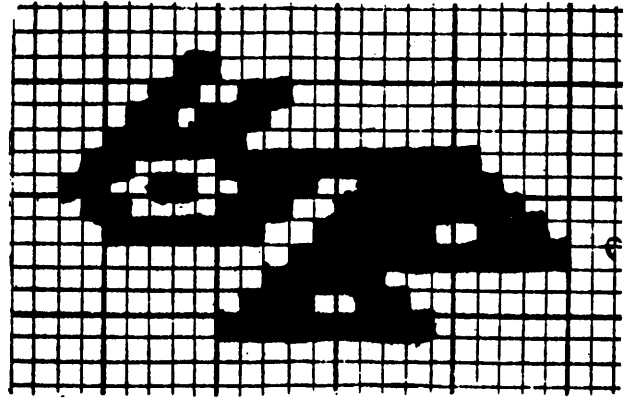


Illustration No. 3

weavers of the Colonial times. Illustration No. 7 is a typical blue and white "Jacquard" coverlet which I also purchased at Palmyra for purposes of comparison with the other type woven on the simple loom. It has a most complicated design of cocks, quails or pheasants, grapes, etc. with what I think is the "Boston town" border, and has no seam but is woven full width. Close examination of these two pieces shows the very obvious *machine-made* quality of the one in Illustration No. 7.

Illustration No. 5 is a piece of all silk double woven fabric designed and woven by the author. One warp is



Illustration No. 4

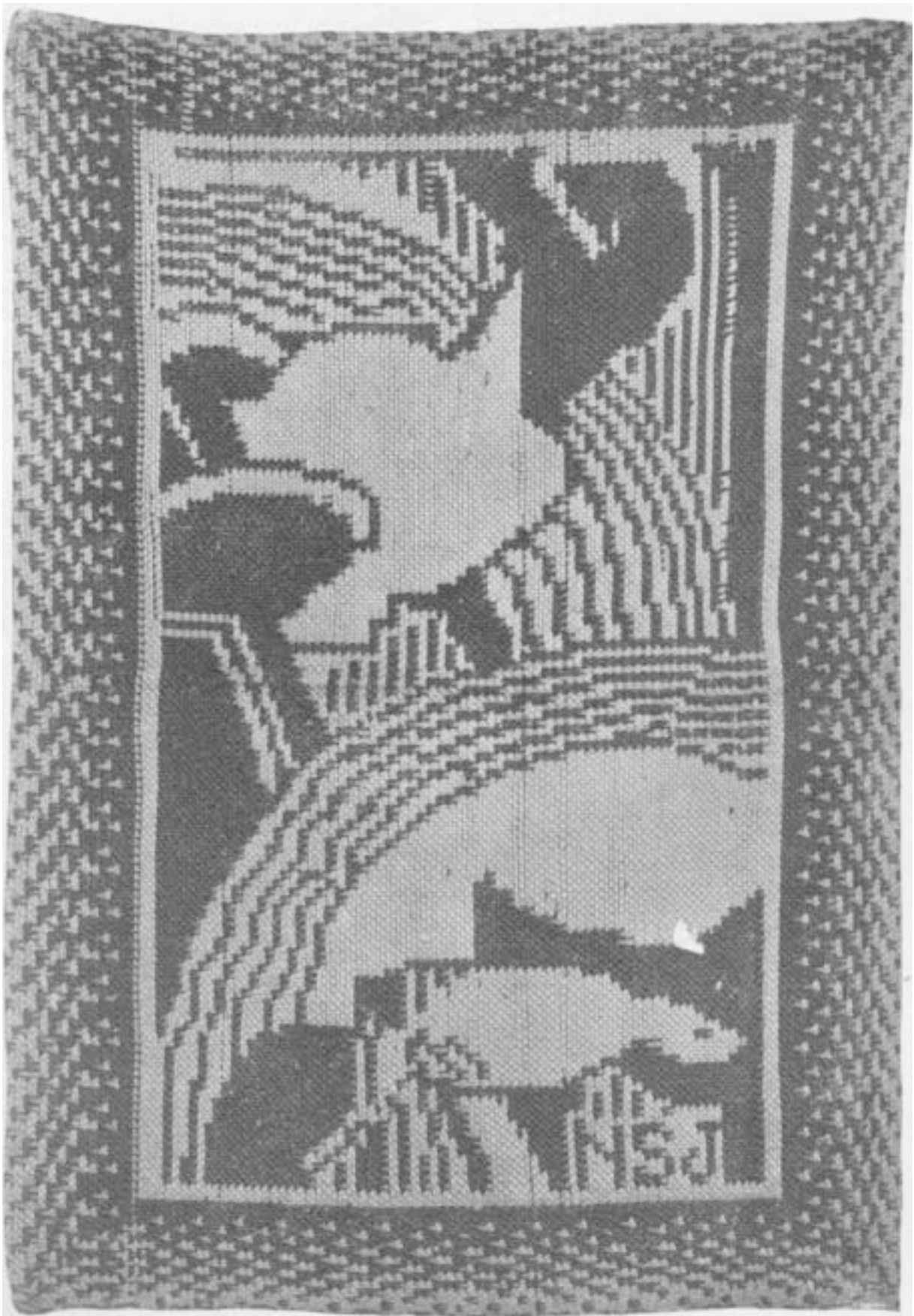


Illustration No. 5

gold silk and the other one thread of blue silk and one of green alternately. Because of the fact that the gold color does not photograph very well, this may not be very clear. But it will serve to show the possibilities for the design of contemporary fabrics, and was an experimental piece to try out the different effect of lines and shading in this technique.

Now a few words as to the type of patterns which are suited for this weave. Any design which can be drawn out on cross section paper can be woven, and it may be as simple or as complicated as you wish to make it. Vertical lines, horizontal lines, and diagonal lines are the easiest to weave. And the possibilities of these simple lines are shown in Illustration No. 8. Curves and circles are more difficult and should be very carefully planned. The finer the warp and the closer it is set in the reed, the easier it is to approach a real curve in the finished weaving. Illustration

No. 9 is an enlarged detail of the border of the woven piece shown in Illustration No. 5, and also shows how to shade areas from dark to light value. This offers a large field of possibility for the person who likes to design, to do some very unusual interesting fabrics. Personally, I feel that this technique should be used for decorative wall hangings using very free designs which show no repeat or all over pattern. Let us get away from the monotonous repeat patterns which the mechanics of the loom control, and do things in this method which are distinctive, individual, and expressive of our own day and age. And to those of you who wish to develop this kind of weaving, this double weaving technique offers a wonderful opportunity. It is very easy to copy some of the Swedish designs in this technique from Maria Collin's book "Flamskvav och Finnvas," or to take some of the Peruvian designs from the book mentioned above. Or to copy some design

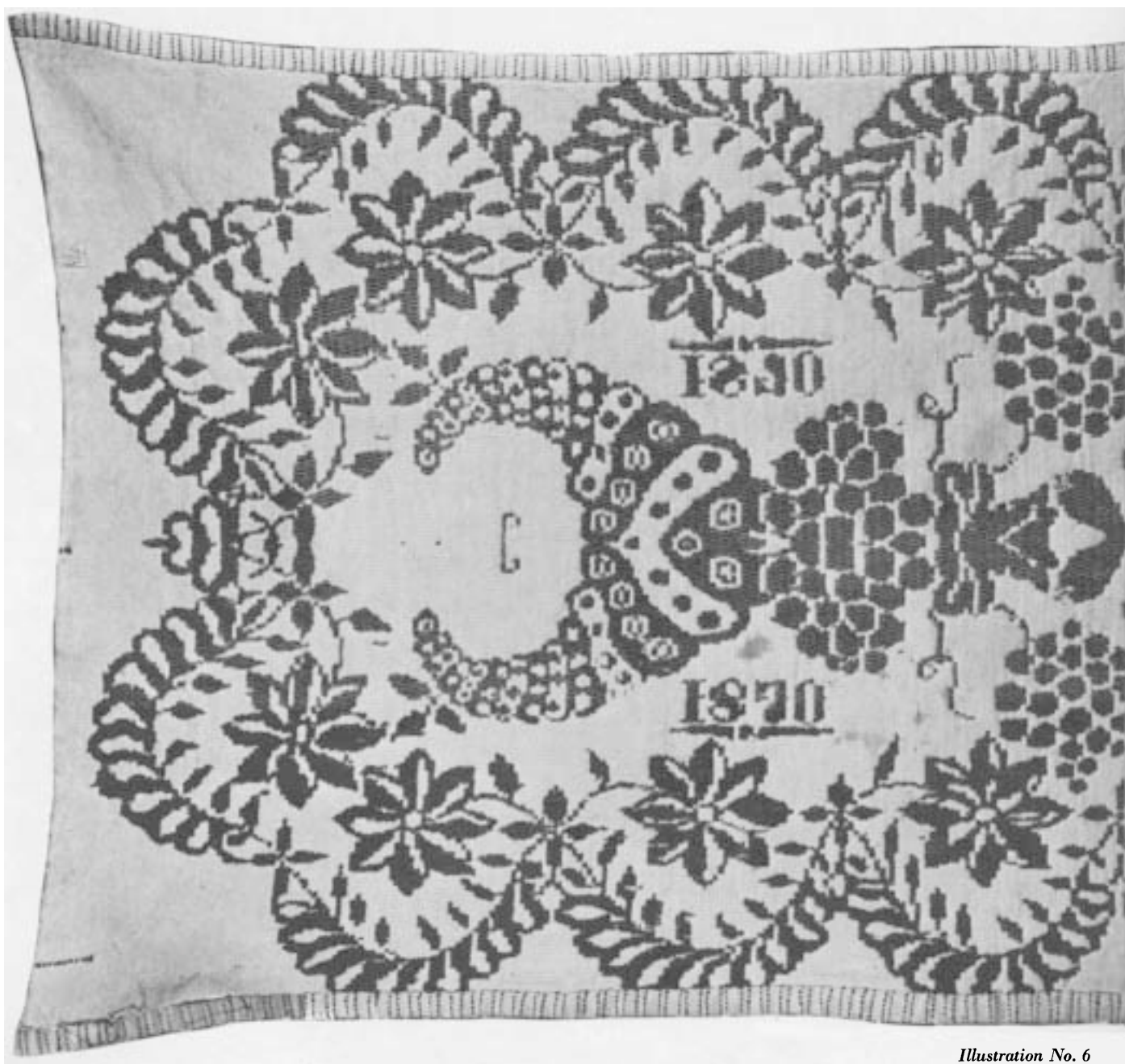


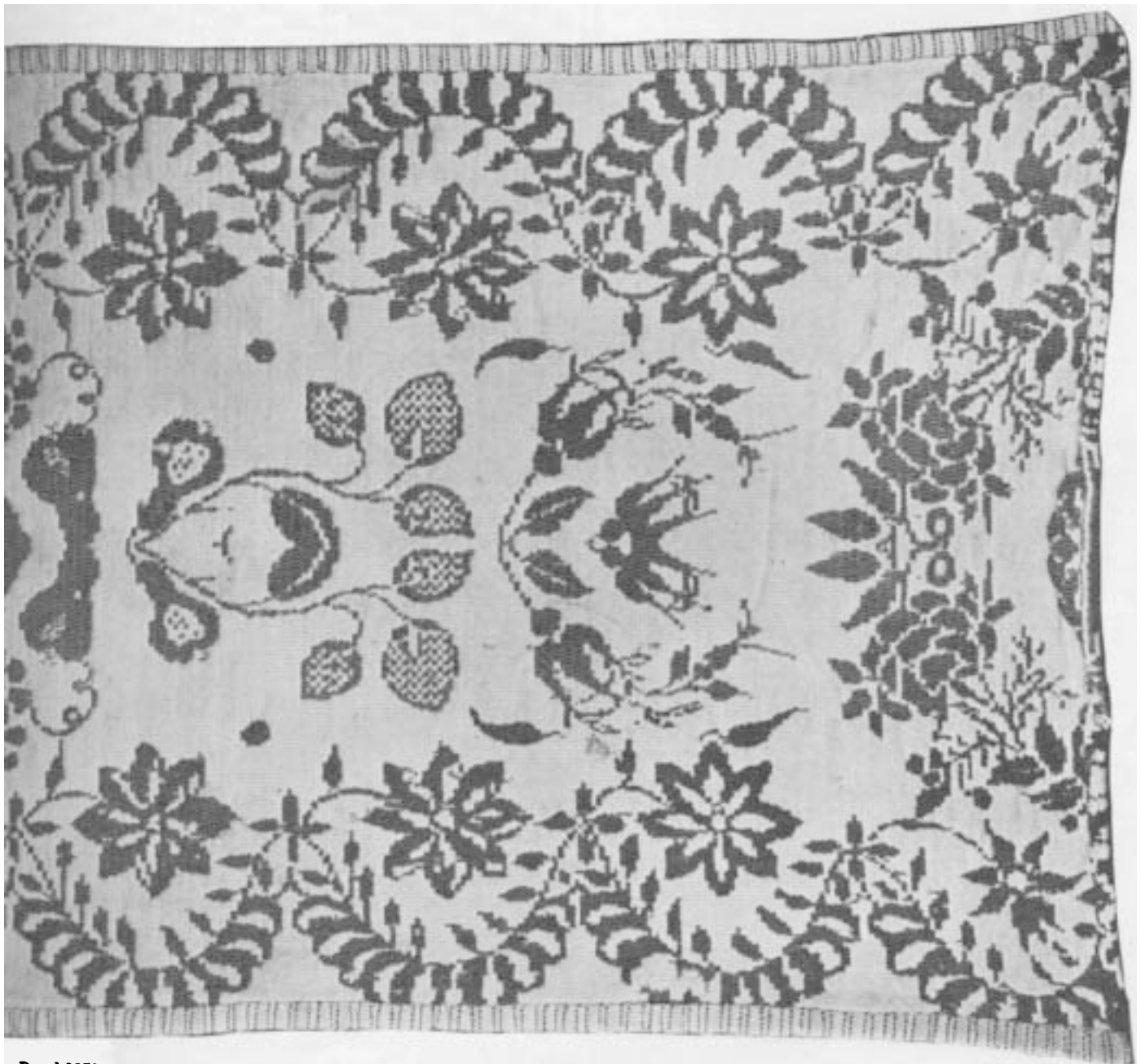
Illustration No. 6

from an old Colonial coverlet. But these patterns, at best, are not more than copies, and can in no way be an expression of our own time and country. We belong to a machine age and speed, expressed by radio, telephone, automobile, and airplanes, and it is quite possible to interpret these as symbols of our own living in our weaving through this double weaving technique.

To design your own patterns for this weave, draw as you would for any clean cut sketch. Transfer this to cross section paper, and then follow the outlines on the cross section paper with blocks as near the original outlines as possible. The finer the cross section paper to which you have transferred your original design, the nearer you can approach correctly the lines of your original design. Also it is easier to follow your original design, if you plan to make it correspond as nearly as possible to the size of the cross section paper you are using to expand it on, and also

keep in mind the width of your finished weaving, if you are working in definite dimensions. Plan to have two dark warp threads and two light threads to represent one block of your cross section paper. Thus if you have 150 blocks on your cross section paper, you will need to make a warp of 300 threads of dark color and 300 threads of light color for this weaving. If you transfer your original sketch to cross section paper which has 10 blocks to the inch, which is a size easy to follow in your weaving, your original sketch will need to be 15 inches wide, for the 150 blocks of pattern or 300 threads of each warp.

For further details of the exact method of weaving this technique on a four harness loom, I will refer you to my "Lesson on How to Weave a Double Fabric in Pattern on a Four Harness Loom," which may be purchased through the "Handicrafter." This was first announced in January 1934, and published in March 1934. And I am very happy



Dated 1870

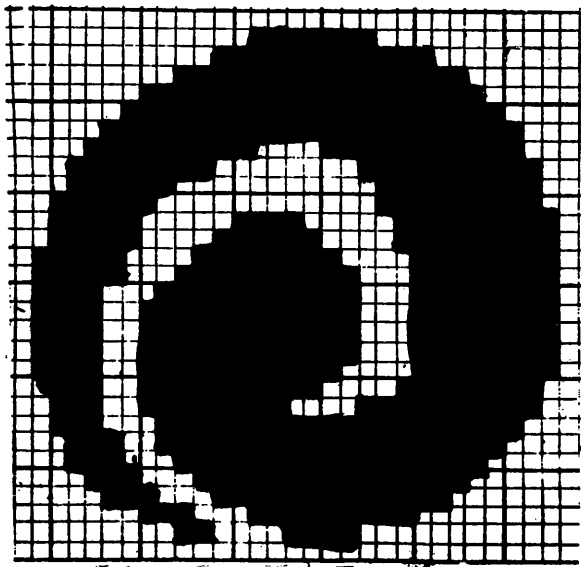
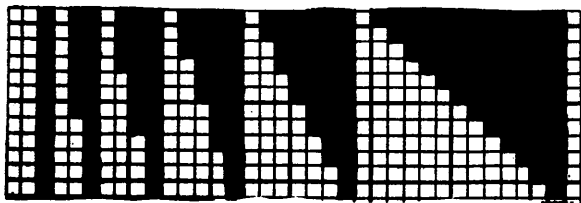


Illustration No. 8

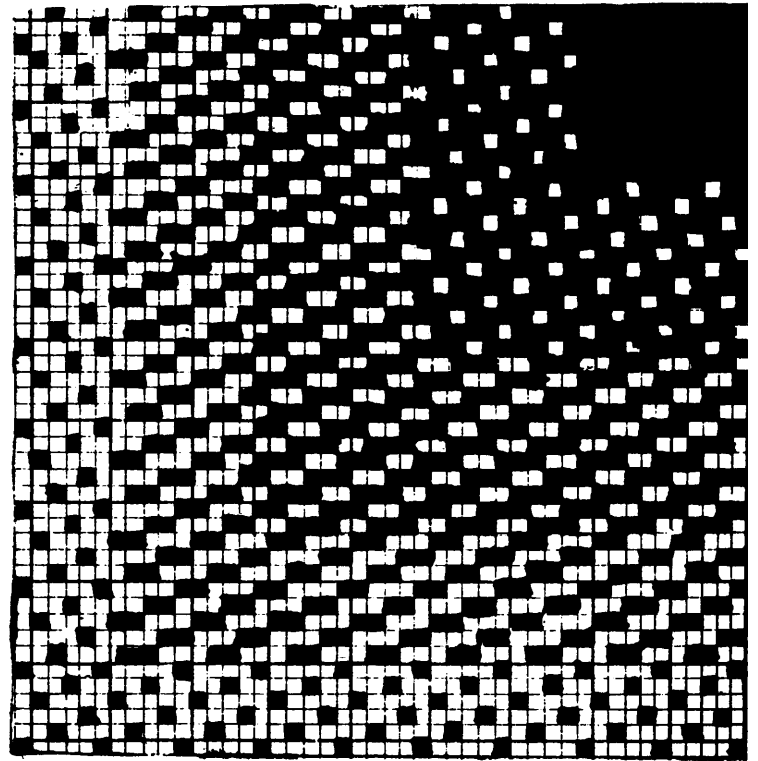


Illustration No. 9

to have been able to work out this ancient technique, so that modern weavers can use and enjoy it. I wish to acknowledge the kind help and inspiration of Miss Helen Allen, an expert weaver and thorough student of textiles, who made the working out of this technique possible. For in a very extensive research, we could find no source where this knowledge was obtainable. Several Swedish books contained vague directions which even a good translation could not make at all clear. And it was only after a good deal of thought and effort that the details of this simple

weave were finally worked out. It is not complicated, and is easy to do though somewhat slower than regular four harness weaving. If you are doing unusual, distinctive weaving, this technique will have a particular appeal. To those of you who are interested, I might also add that I am sending out each month, "Handweaving News" which is a monthly letter on handweaving; subscription price for this is \$3.00 a year, and may be obtained directly from me at 12489 Mendota Ave., Detroit, Mich., or through the "Handicrafter."



Illustration No. 7