

Figured Mock-Lenos

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Fabrics containing figured lenos are very attractive, but are rarely seen. To weave such cloths requires great skill, and the production is slow. This accounts for the practical disappearance of this class of fabrics. It is, however, possible to develop mock-lenos which appear very much like real lenos, and can be woven without additional expense and at a loom speed such as is used with any other ordinary fabric.

Mock-lenos are not entirely new. They were developed in England in 1900, and spread into other countries. During the War, they were forgotten. Some of these figured mock-lenos, with their cord-like and figured effects, look a great deal like real lenos. To obtain this result, the ends, or picks, producing the effect, do not interweave where the figure occurs. The yarns slip together at the figure, on account of the floats, and force the floating ends and picks above and to the side of the other yarns, thereby creating a leno effect. It is of vital importance that the yarns float and that no interweaving takes place, since only by such methods is it possible to force up the figure yarns, and permit the filling and warp to slip into different positions and form the leno effect.

Floats in the texture of figured mock-lenos, are always necessary. They permit slipping, it is true, but do not affect the firmness of the cloth if skillfully manipulated. They can, however, be seen on the back of the cloth.

For best results, it is necessary to place the figured warp ends on a separate beam. It is also advantageous to weave the figure warp with little tension. In doing so, the figure ends will be properly woven in, and the figures nicely rounded. If the figure warp is woven as tightly as the ground warp, the figures are pulled lengthways and appear pointed. In this case, the figures have the appearance of real lenos, since the ends slip over, but it is not desirable, because the effects will not be alike in both warp and filling, and a faulty cloth will be the result.

For the figure ends, heavier yarns are used,

but this is not absolutely necessary. The writer has used rayon yarn of the same size as for the ground warp for figures. It is not absolutely necessary to use a separate warp beam, but when two beams are used, the fabric will be more uniform and have a better appearance.

Mock-leno effects can be woven in both warp and filling direction. When woven in the filling direction, the floats must be on the surface and crowded, that is, the filling is woven in with the take-up pawl raised. It is also advisable to weave the mock-lenos with several picks. When weaving filling mock-lenos, it is necessary to use special warp ends, so as to pull the filling out of position and create the open work leno effect.

In this discussion, the following mock-lenos will be dealt with:

I. Mock-leno with quadrangular floats:

- (a) With two figure ends lying side by side, but each one with a different interlacing.
- (b) With two figure ends, but with equal interlacings.
- (c) With one figure end.

II. Mock-lenos with pointed floats.

III. Mock-lenos with interlacings between the figures.

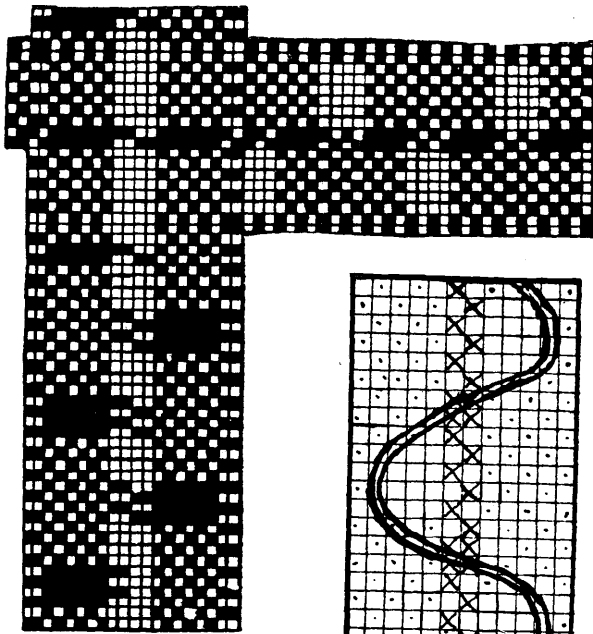
- (a) With a minimum of interlacing.
- (b) With a maximum of interlacing.

IV. Mock-lenos with one floating end and as an addition.

V. Mock-lenos with floating yarns on the surface.

For each group, a sketch will be given. The ground weave is marked by dots, and the figure end is indicated by small crosses. In addition, a line is drawn to show the figure end.

Plain weave has been chosen for the ground weave, but other weaves can also be used, and the figure stripes must be woven with plain weave.

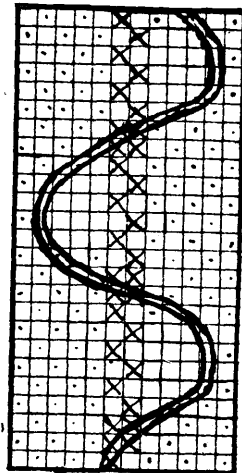


Design 1

I. Mock-leno with quadrangular floats.

In sketch I, the mock-leno effect is of a square, or checked, character. Four warp ends and four picks create the checked effect. As a rule, four picks interlace in plain weave, then comes a place where four warp ends and picks float. At these places, the figure ends are woven in plain weave. The pick, which binds in the warp figure, pulls the floating figure ends to one side. The figure ends are pulled into a curved position back and forth over four ends.

Sketch I shows the interlacing. The ground weave is plain and is indicated with dots. The figure ends are designated by crosses. For this effect, two figure ends are used, each figure end being raised over three picks and then interweaving plain weave for five picks. The figure ends are plainly seen and so are the floats. The two curved lines show the mock-leno effect as it appears in the fabric.



Sketch I

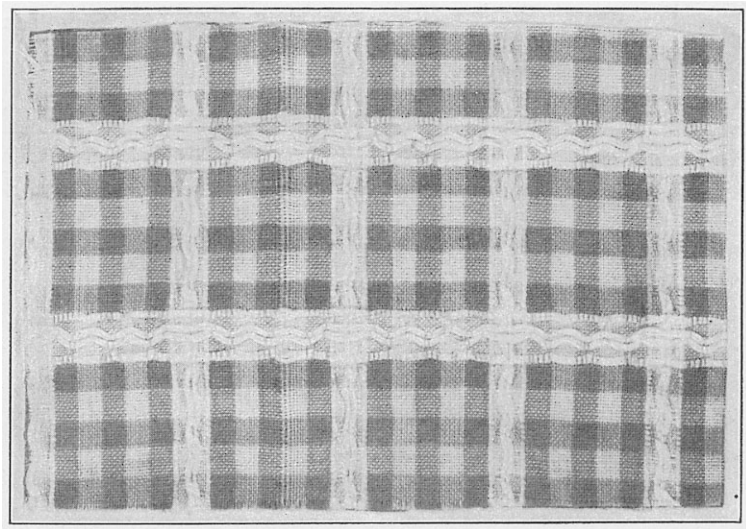
In this sketch, it is quite apparent how four picks of plain weave alternate with four picks containing floats. The size of floats depends upon the figure ends. The figure ends repeat in eight picks. For this reason, the floats consist of one half of eight or four ends. This arrangement can be taken as a general rule, at least so far as the filling is concerned. There is no definite method for floating the warp ends, since they are limited only by the figure ends, and how far they are to be pulled over the other warp ends.

In the sketch, two figure ends were used, each one being independent of the other. It is permissible, however, to use one figure end, or more than two ends, if desired, and they may be interwoven collectively. For this reason, the weave formations are grouped in subdivisions.

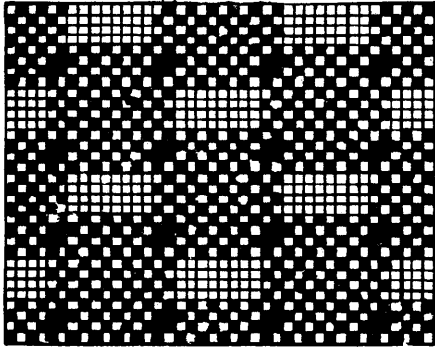
a. Figured mock-lenos with two figure ends lying side by side, but each one weaving differently:

Here are a few examples. Design 1 and illustration of cloth show a figured mock-leno, consisting of curved lines. The sketch is clear, and a further explanation is unnecessary.

In addition, design 1 also shows a similar figured mock-leno in the direction of the filling. In this case, the floats are so arranged that the warp pulls the figure picks over the floating ends. It is necessary to use two ends



Sample 1



Design 2

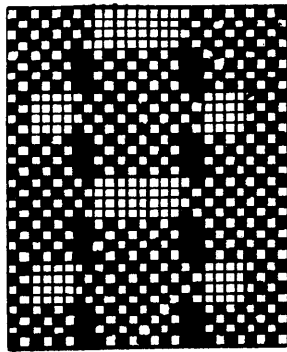
for stitching, to obtain the desired effect. In this design, two picks are used for the figure, but each of the figured picks consists of two separate though equally interlacing picks, and therefore four picks are required. To obtain the proper effect, it is necessary that the picks be forced to the surface, i.e., the take-up pawl is lifted when the curved filling is interwoven.

Design and sample 2:

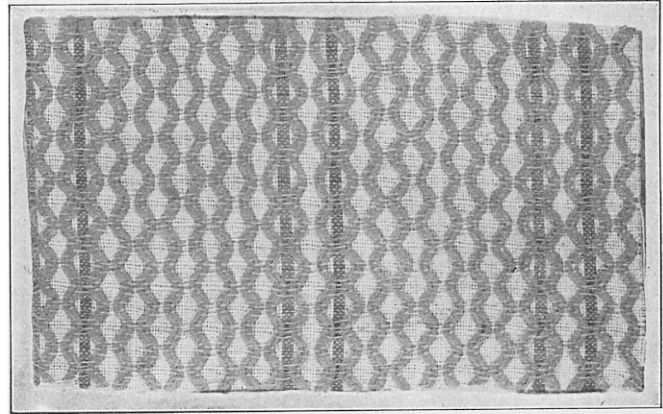
This is similar to 1, except that the figure is produced by the warp instead of by filling. Here the figured mock-leno covers the whole width of the cloth. It can be seen how well rounded the figures are, when woven into the fabric. On the point paper, it can plainly be seen that the floats almost join, and are separated by three picks with the float pattern repeating on eight picks. It can also be seen that the figure ends are drawn over the plain ground weave.

Design and sample 3:

This is a figured mock-leno woven



Design 3



Sample 2

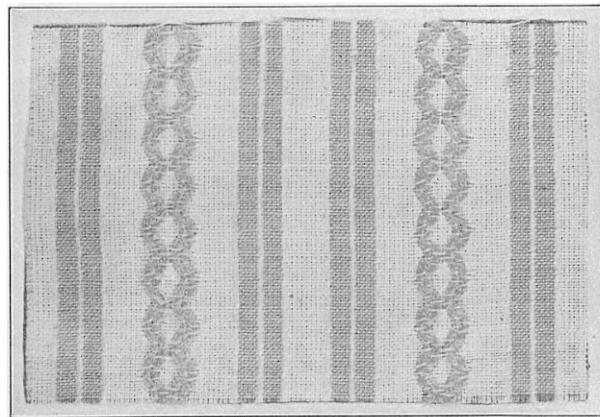
in stripes. Although these designs are very similar to one another, they are reproduced to permit a better understanding by the reader. This object is secured easiest by a large number of illustrations.

Design and sample 4:

This design is made by eight double figure ends, and combined into a striped design. Curved lines are obtained only because the filling is too weak to pull the warp ends together, as in samples 2 and 3. Actually, this design is undesirable. There are long filling floats on the face of the cloth, and these should have been drawn together by the figure ends, thereby producing a pleasing figure.

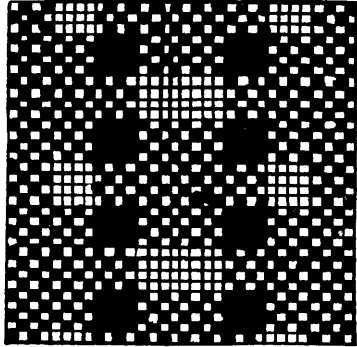
Design and sample 5:

This pattern is a different type of a figured mock-leno.

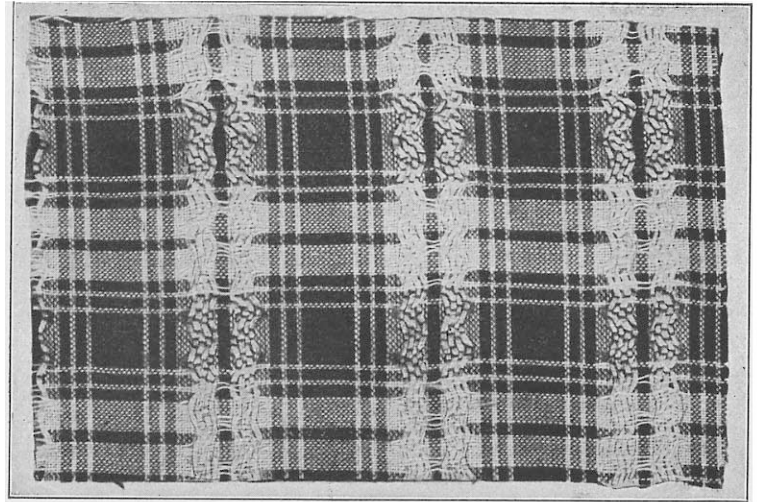


Sample 3

The warp figures are different than in the previous sketches. The figures in the filling direction also show a



Design 4



Sample 4

different result. Although there are two separate picks required to produce the single mock-leno effect, they are not woven in jointly, but separately, as can be seen from the design.

Just as in design 1 and sample 1, only the warp ends interweave at those places where mock-leno figure warp and filling cross each other. In very few cases, is the filling figure used for stitching.

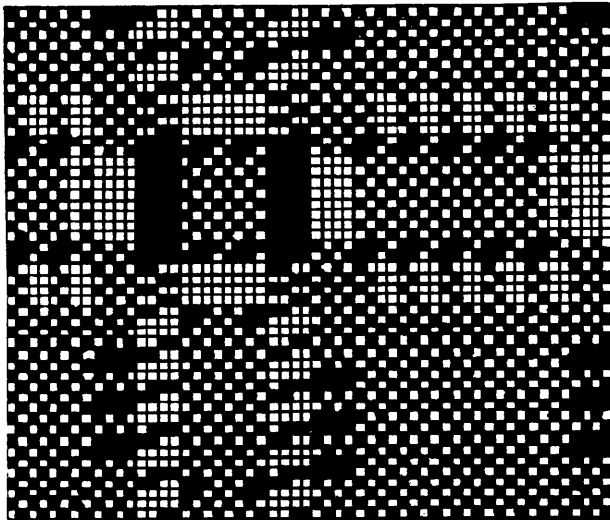
b. Mock-leno with two, or more, figure ends weaving exactly the same:

This type does not differ from the previous one. Only the figure mock-leno ends interlace

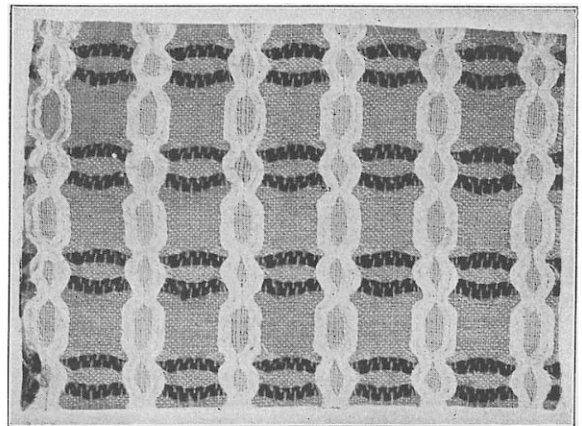
alike, although two ends are available. Sample 6 indicates the method used, and a detailed description is unnecessary. In this design, there are six single picks, combined to produce one mock-leno effect. Each pick is woven in separately, which ought to be emphasized. The result of this design is quite satisfactory, however, a different number of picks may be used instead of six, if so desired.

c. Mock-leno with only one fancy warp end:

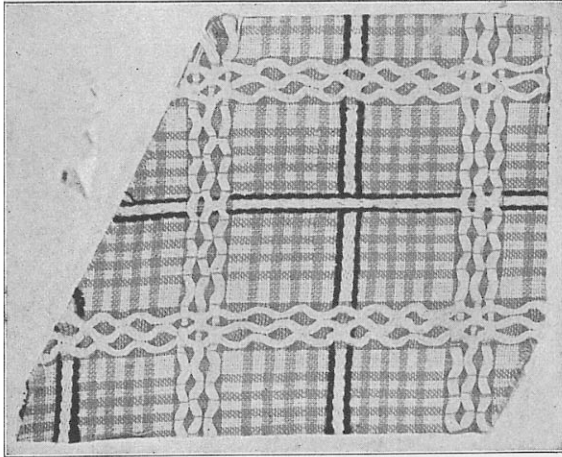
In design and sample 7, the figured effects consist of wavy lines, with the difference that the figure mock-leno consists of a single end. In this case, the pattern repeat requires six picks, therefore, the floats pass



Design 5



Sample 5



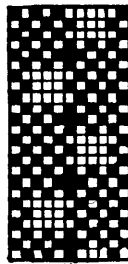
Sample 6

over three picks, exactly as the rule suggests.

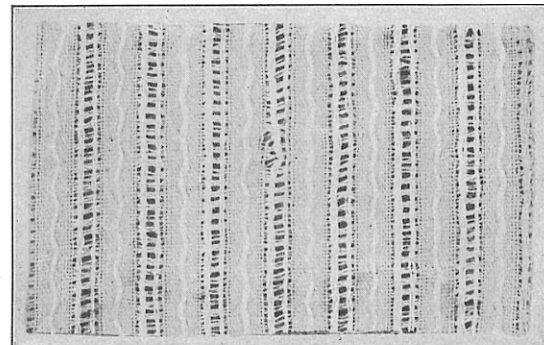
This figure mock-leno reposes on the plain weave ground, being interwoven with it. To make the figure stand out clearly, plain weave was used, but other weaves also can be employed, without interfering with the design.

Design and sample 8 show another illustration of this type, in which two fancy yarns are manipulated in an opposite manner, in order to form a curved figure. This figure is combined with an ordinary mock-leno ground effect.

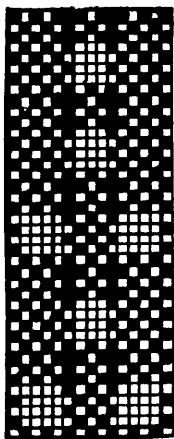
Design and sample 9 is the last in this series of designs. In this design, a variation from the usual rule can be observed. The floats pass



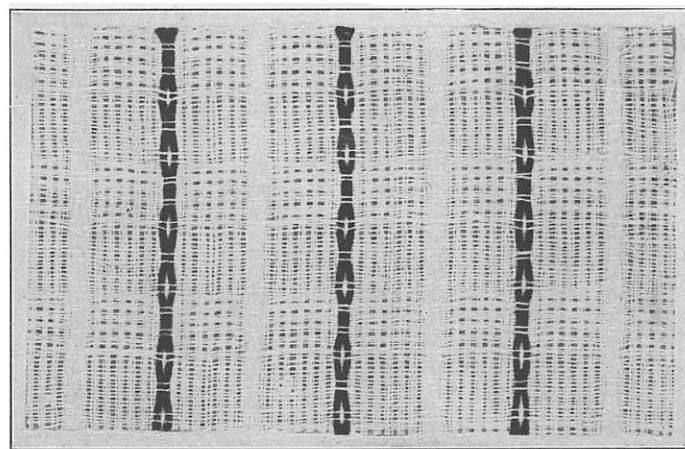
Design 7



Sample 7



Design 8



Sample 8

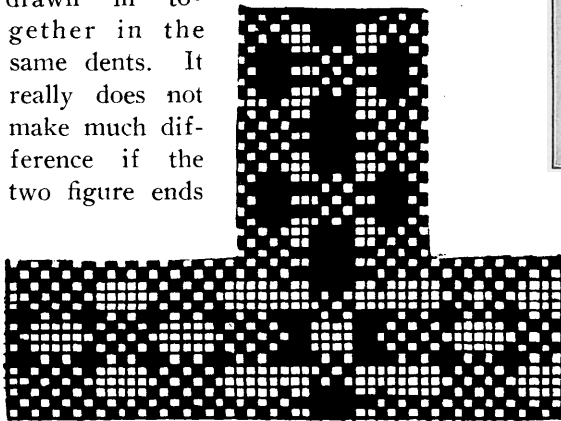
over five picks, with a repeat in six picks, while, as a rule, the floats should be over three picks. The filling figure is obtained by allowing two figure picks to interlace at the same time. In this design, as in the others, where warp and filling effects cross each other, the warp is raised over the filling figure.

As can be seen from the design in which the filling is used for figured mock-leno, the weave formation is about the same as for the figured warp mock-leno, only the warp ends are lowered instead of raised, as in the figured warp mock-leno.

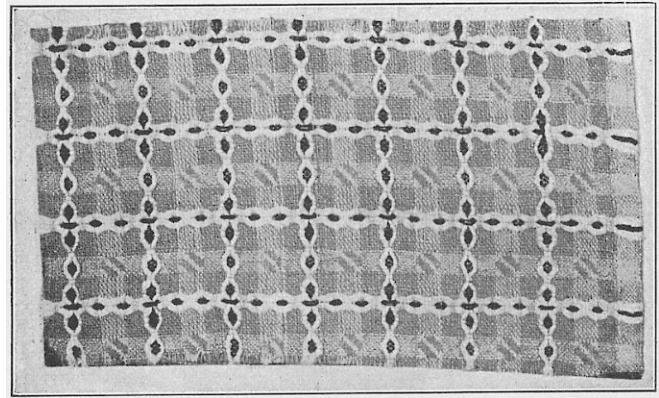
The weave formation, as discussed in 1, is considered the most conservative type. The ground is always well woven, so that the cloth

appears well constructed. It is true the quadrangular floatings on the back of the cloth are not very desirable, but this can be eliminated. As can be observed from the sample, the mock-lenos are well laid out. The first one was developed by the writer, and has remained the most satisfactory one. The warp ends of the mock-leno are considered as additional yarns, since they float on the surface of the cloth. For this reason,

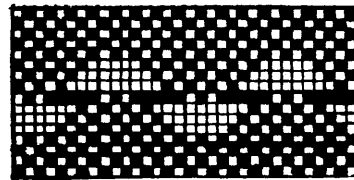
the warp yarns are reeded two ends per dent, and the mock-leno end is drawn in as a third end in the same dent. In case both figured warp ends interlace in the same manner, then they must be drawn in together in the same dents. It really does not make much difference if the two figure ends



Design 9



Sample 9



Design 10

are drawn into separate dents. The method depends largely upon the reed selected.

II. Mock-lenos with pointed figures:

This class has pointed, instead of quadrangular, figures. The fabric, however, is somewhat less uniform, because more ends are required for pointed floating than for square designs. Nevertheless, this disadvantage is offset by the more pleasing appearance of the back side of the cloth. Incidentally, certain designs appear well in the cloth, and if the floats are properly chosen, a firm piece of cloth can be woven. The effects obtained are often as good as those produced in group I, and sometimes even better. As can be seen from sketch II for every float 9 picks are needed, while sketch I requires only four to six picks. In spite of this, the figured mock-leno has turned out fairly well. This effect is executed according to sketch I.

The dots show the plain ground weave, the crosses show the weave of the figured mock-leno. The curved line indicates the effect as it appears in the cloth. Design 10 refers to type of cloth just described.

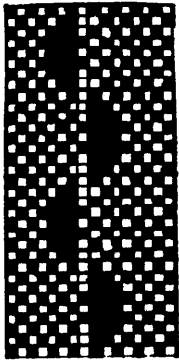
Design 11 shows a curved line in the filling

direction, in a similar manner as 10 in the warp direction.

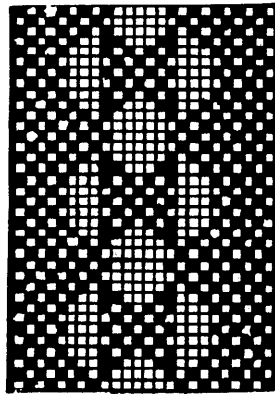
Design and sample 12 shows a closed figure for a motif, as already shown in numbers 2, 3, etc. It can be seen how well the figure mock-leno is outlined. The Jacquard cloth shows also mock-lenos in the ground. By comparing design 12 with design 6, it can be seen readily that there is scarcely any difference in the effects, though the ground weave is different. Since this type of fabric is closely constructed, the long floats do not seriously affect the structure, nevertheless, it is advisable not to make the floats too long. This design can be used both warp and filling-ways, whereby squares can be produced. Design 12 can be used for warp effect, and design 13 for filling effect. Single ends and single picks have been used in these sketches, but for better effects, double warp ends and double picks are desirable.

Design and sample 14 shows a filling mock-leno. It can be noted how easy it is to develop such filling mock-lenos.

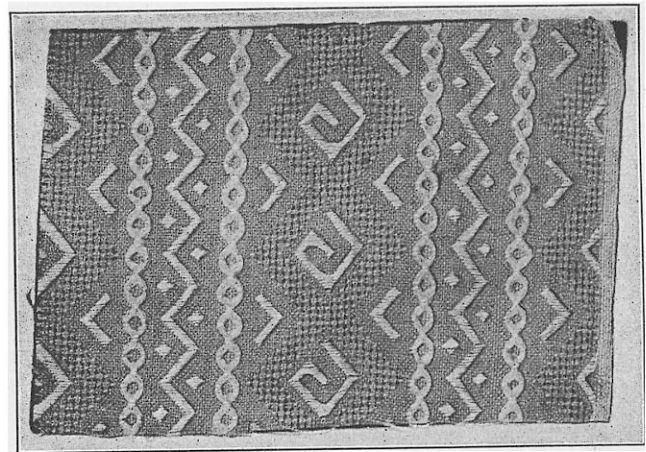
Design 15 is another variation of a figured mock-leno. The figure is running in the direction of the warp as a curved line. By comparing design 10 with 15, it is at once apparent that 10 is of a more firm texture. In design-



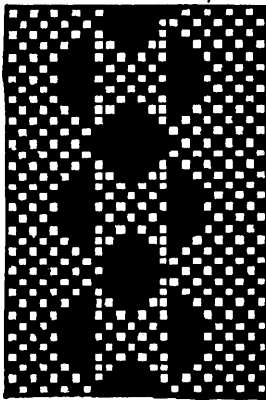
Design 11



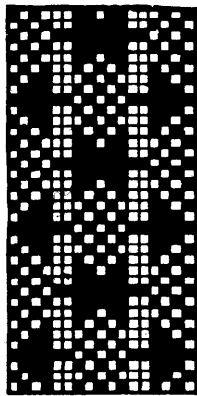
Design 12



Sample 12



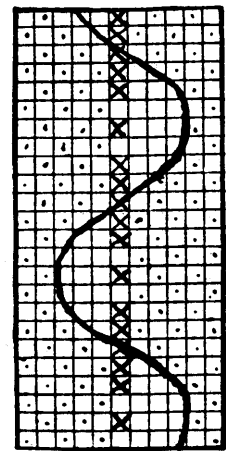
Design 13



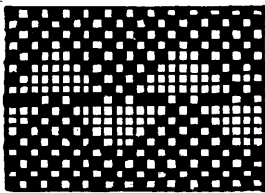
Design 14



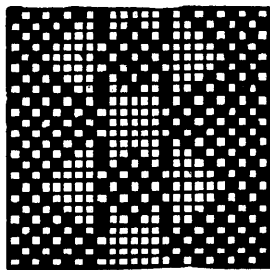
Sample 14



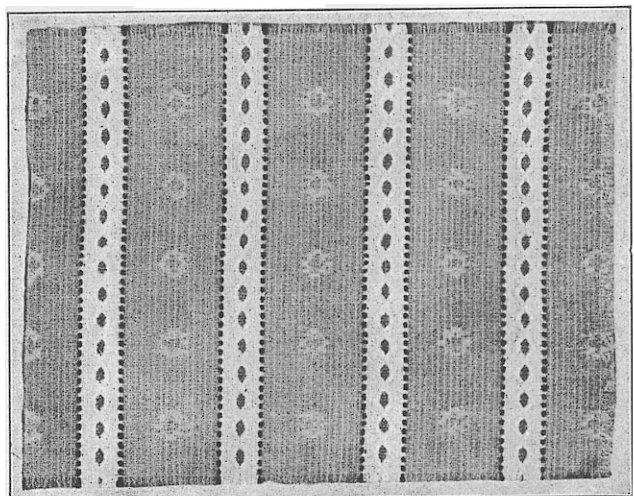
Sketch II



Design 15



Design 16



Sample 16

ing a curved line, it is preferable to choose type 10 in place of type 15.

Design and sample 16 is similar in effect to 15, and this in turn, is similar to 12. Design 12 is to be preferred to design 16 in regard to weave.

Sketches with the same general motif, have

been used for the purpose of emphasizing the slight differences in methods and results. The sketches that follow, contain similar figures, but additional designs will be added to create variety, and also to show how new designs can be developed.

(To be continued)