

Figured Mock-Lenos

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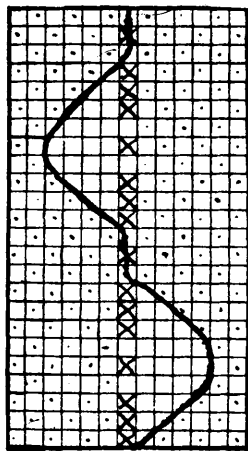
(Continued from July issue, page 536)

III. Figured Imitation Leno with Interlacing Between the Figures

The sketches as drawn in Section II produce fabrics which are somewhat flimsy. Therefore, it was necessary to design new sketches, similar to Section I for fabrics containing a more firm construction. This object was attained but the figured imitation leno came out somewhat large because the tight stitching between pulled the filling away thereby causing the figure to appear larger.

(a) Figured imitation leno with slight stitching between figures.

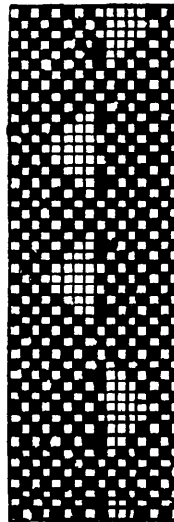
Sketch IIIa shows this type of figured imitation leno. The dotted squares indicate the interlacing of the ground, the crosses show the warp ends which form the figure. The black curved line shows how the figured imitation leno appears in the woven cloth. The curves will be somewhat separated but in spite of this condition the figures will come out well. The interlacing takes place every third pick so that the cloth holds together by these three picks which is the case in No. 1 but not in No. 2. The stitching idea has been strictly carried out in Section IIIa.



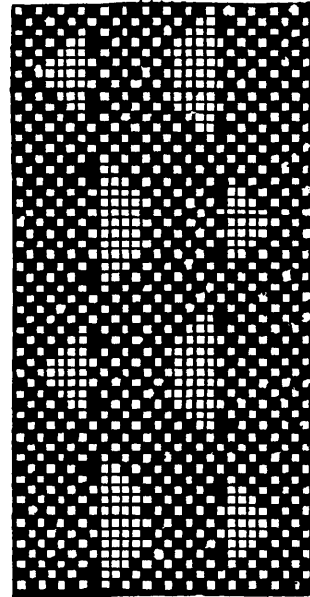
Sketch IIIa

Design No. 17 develops a curved line with two windings on each side. If it is desired to

have only one curved line then it is necessary to take out the two opposite curves from the middle of the design.



Design 17



Design 18

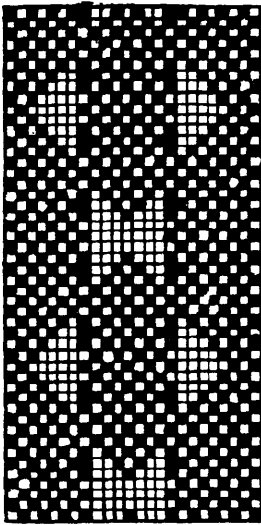
Design No. 18 creates a different effect. Here are two figured imitation lenos close together which gives the appearance of one. If the three warp ends of plain weave be taken out of the middle of the design the deception is more perfect. The curved lines alternate to the right and to the left and in the finished cloth they appear as one straight line. Since the second warp end which makes the figure interlaces on the opposite side, it creates the appearance of a curved line being wound around a cane.

Design No. 19 is similar to No. 12 but is broken and, therefore, appears to be larger.

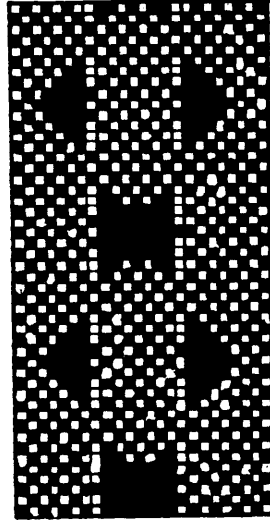
Design No. 20 is the same effect but carried out in filling direction.

Design No. 21 shows the motive of the figure as in No. 19. Small and large figures alternate.

Design No. 22 completes Section IIIa. This design shows two figures lying side by side which appear oval at the edge having been

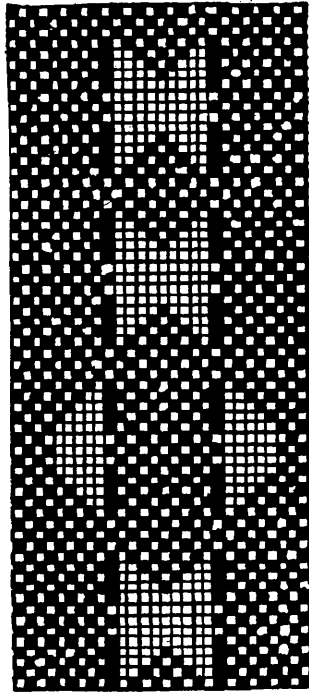


Design 19



Design 20

elongated somewhat. These two figures are formed by four warp ends. At the point where the leno effects meet, a small figure is formed as in design No. 12.



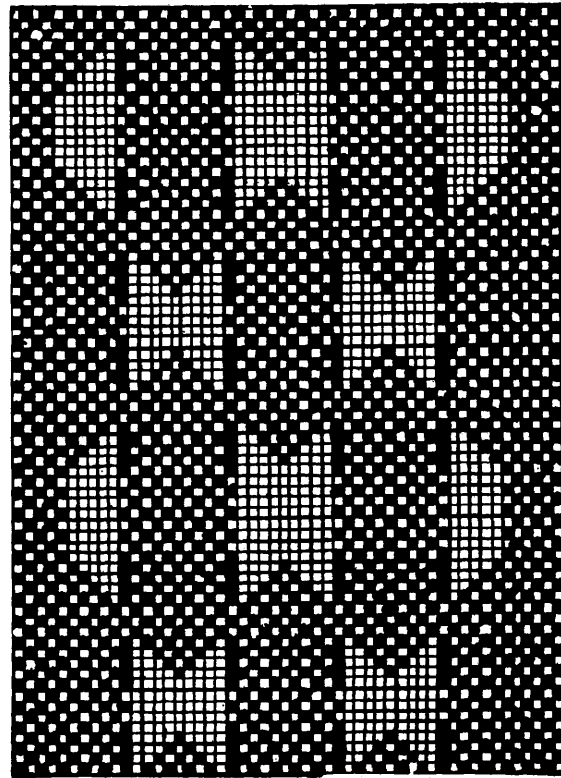
Design 21

As has been pointed out previously, the introduction of tight interlacing causes some separation but the fabric becomes more solid, since the tight interlacing causes every section to be

stitched together with the leno in every other section. For this reason, the figured warp ends can be pulled aside further whereby the figures will appear larger. This is an advantage, as otherwise the figures would appear too small.

(b) Figured imitation leno containing larger figures.

It can be seen in Sketch IIIb how the curved line is broken and still retains the appearance of a curved line. The interlacing consists of seven picks which makes a very solid fabric as compared with Sketch II. The figures can be enlarged also, as, when unbroken, they will be of the size of IIIa. This sketch as yet has not been tried in cloth, but there is no reason why it should not work out as stated.

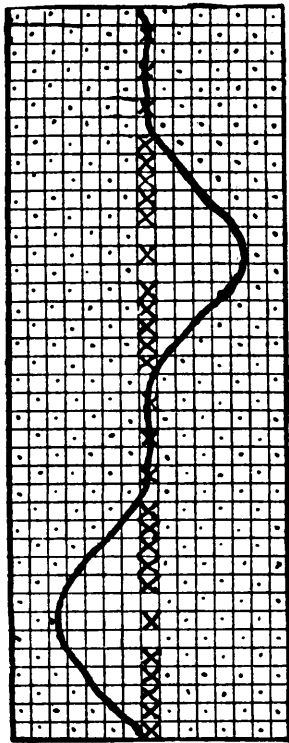


Design 22

Design No. 23 shows a curved line which has been obtained by drawing a design according to Sketch IIIb.

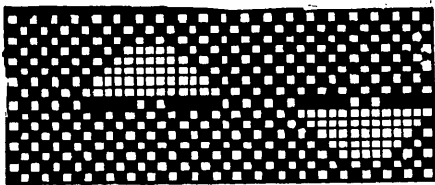
Design No. 24 is a figure which has the shape of a rectangle, on the top and bottom of which triangles are added. This shape is obtained when the warp is kept slack or the figured warp is kept taut.

Design No. 25 is carried out according to Section I. The floats are short as they extend over only three filling and four warp



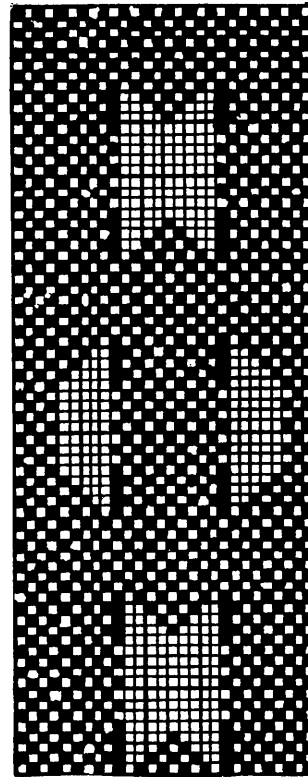
Sketch IIIb

ends. A tighter interlacing seems to be unnecessary. In spite of this, additional stitches are provided so as to produce a more solid fabric.



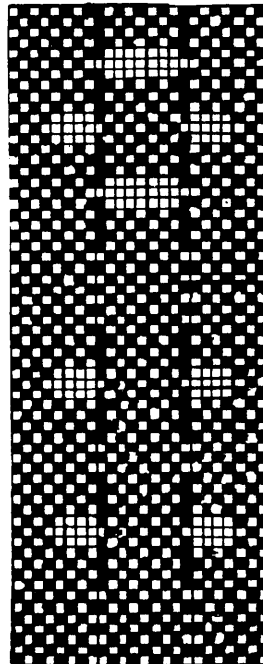
Design 23

This figure is similar to No. 1, No. 2 and No. 3. Adjacent to this figure is a section which binds the warp end just where it should be after being reeded in. Adjacent are two curved lines running on each side but which are divided by tight interlacing. The figured warp ends in the effect are pulled inward and outward, which is the position in which the figured warp ends would be without imitation leno. They bend outward twice returning to their original position.

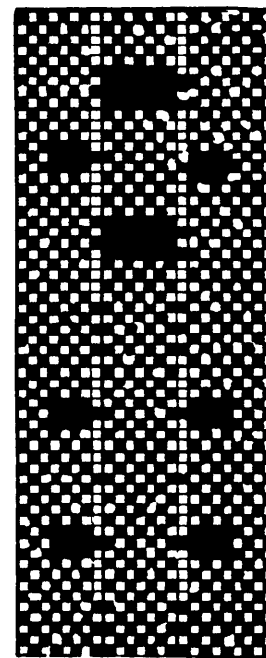


Design 24

Design No. 26 shows the same picture as design No. 25 but in filling direction. As can be seen four warp ends float on those places



Design 25

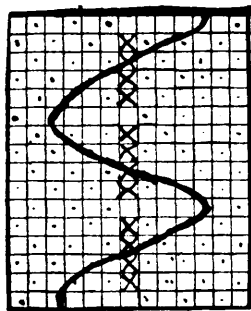


Design 26

where both figured fillings are pulled together. This is due to the fact that the warp ends are not in a position to exert a pull equally as strong as the filling exerts on the warp design. Therefore, it is better always to use two warp ends for pulling where a warp figure is obtained with a single pick. It must be kept in mind always that in developing figures in the filling direction it is necessary to give more tension to the figured filling than when designing a figure in warp direction.

IV. Figured Imitation Leno with Only One Floating Warp End

This type of interlacing is related to designs such as appear in Section I. The figured imitation leno is woven very loosely but is never stitched to the ground weave. The effects so obtained are quite satisfactory. No cloth samples are available to show this effect. It is desirable if the warp ends for the figured imitation leno are of heavy yarn size. It must be mentioned, however, that if the figured warp beam is kept slack only slightly, a flaw will appear in the fabric.



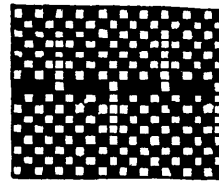
Sketch IV

Sketch No. IV shows how the warp end of the figured imitation leno will appear in the fabric. The effects obtained will be better and more pronounced than in any previous sections, but weaving has to be done very carefully.

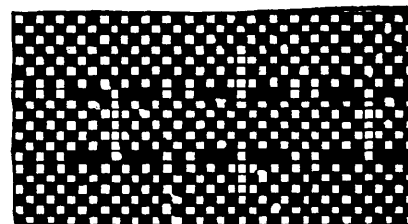
Design No. 27 shows the curved line as drawn in Sketch No. IV.

Design No. 28 varies from the standard method by interlacing between or at the figures to make the fabric more firm, similar to the method used in section IIIa. This is done simply to enlarge the figure. It is obvious that

the figured warp ends will receive some stitching, but this will not interfere in making a pleasing design, if the weaving is done care-



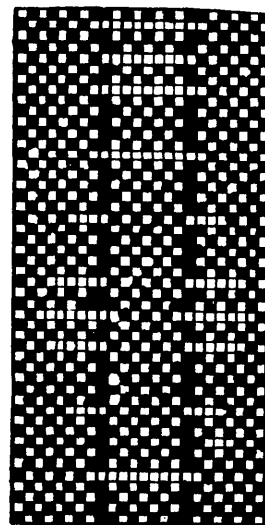
Design 27



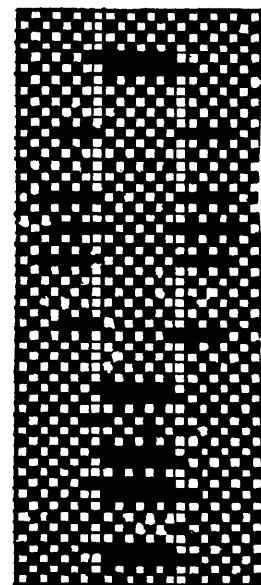
Design 28

fully. The figure will be very similar to No. 2, but, due to the tight interlacing, it is divided into two parts which make the figure somewhat larger.

Design No. 29 shows again a different effect. In this design the figure is formed according to No. 2 but the result is much elongated. It is pulled sideways by five differently floating



Design 29



Design 30

picks. Since the figure is pulled also by five picks inwards where both figured warp ends meet, a straight line is the result.

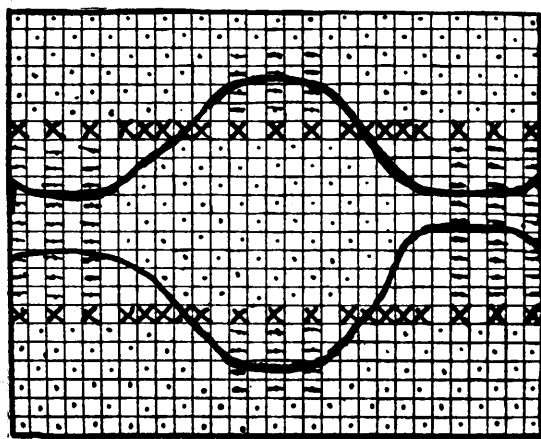
Design No. 30 is the same figure but with the effect in the direction of the filling.

Two warp ends are used also just as in No. 26, while in No. 29 only one pick was required.

The final design in this section is No. 30.

V. Figured Imitation Lenos with Floats of Warp Or Filling on the Cloth Surface

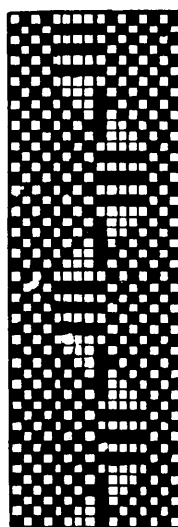
These designs would have been omitted had they not been described in textbooks and shown in textile schools as figured imitation lenos. Strictly speaking, they cannot be designated any longer as figured imitation lenos although the effect obtained is similar. Since warp-and-filling floats alternate, these ends are forced into such a position that they are prevented from being drawn together. If the figured warp ends are pulled outward, they will be counteracted and the result will be a much diminished figure. Where both figured warp ends are pulled in opposite directions, the figured warp ends are so placed that they cannot meet. This refers to normal weaving. If the figured ends are being woven tightly and in addition floating warp ends are reeded in one or several dents, the warp ends then may be pressed under the figured warp ends. The figures so obtained will be of the type known as figured imitation lenos. However, this is not a normal condition. If the warp is reeded normally, the warp ends will be placed between



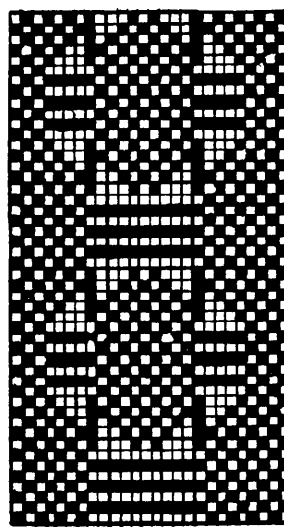
Sketch V

the warp ends which produce the figure. A design so obtained has a fairly good appearance but it is not a real figured imitation leno.

In model Sketch V, a representative figure has been sketched. In all other respects the drawing is the same as in previous designs, only the warp ends on the surface are designated by lines. In the sketch the smaller and the larger spaces alternate. This has been done for the purpose of relieving the strain which the filling exerts. Although the filling strain will be the same, a great deal depends upon the tension of the figured warp ends.



Design 31



Design 32

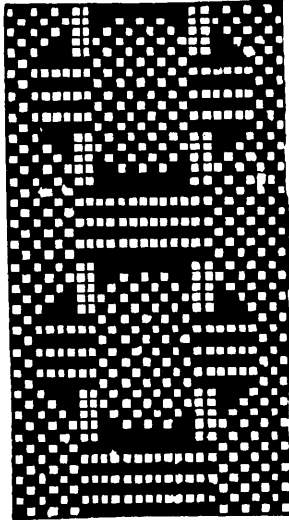
Design No. 31 shows a curved line on this principle. It will be observed that it is much flatter than those sketched previously.

Design No. 32 shows a figure which has been lengthened by additional warp ends, similar to No. 24.

Design No. 33 is similar to Design No. 32 but the effect has been obtained by the filling instead of by the warp.

What has been stated about the appearance applies particularly to the filling. It can be seen from the sketch that the results obtained will never be as effective as shown in the previous sections. In this type, the warp ends must be pressed together by three groups of warp ends, each one consisting of nine ends. In the warp direction this can be done because the filling can exert a certain amount of tension, but in

filling direction the nine picks which are woven closely are pulled tightly together, for which purpose the warp ends are not strong enough. The design in the filling direction has been



Design 33

given purposely to bring out the relation of the warp in this type of weave, and to show that It is not a real figured imitation leno but only something similar. There is no question but that the filling could be drawn differently so

that the warp ends might not pull together both figure picks, but when this is done the problem becomes more complicated because the three filling interlacings must be incorporated also for the purpose of harmony of warp-and-filling figure.

It cannot be denied that by such procedure remarkably good effects can be obtained, but regular figured imitation lenos cannot be secured.

The textile designer always must see to it that a good saleable fabric is made. For this purpose he will select only such designs as will give him good results without question. If a practical textile designer requires figured imitation lenos he is not going to select them from Section V. A theoretically trained man might be excused if he selects a design from this group, because it is difficult for him to visualize the effect in the woven cloth. It is emphasized that sketches in Section V. cannot be designated as anything else but an imitation of a figured imitation leno. It is not stated that these sketches are wrong, but that they do not belong with the imitation lenos, although textile school textbooks do designate this type of weave construction as figured imitation lenos.