MANUFACTURE OF RIBBONS, TRIMMINGS, EDGINGS, etc.

(Continued from December issue.)

SUGGESTIONS FOR STRIPES.

Fig. 183 to and inclusive Fig. 198 show a collection of floral and geometrical designs prepared for these ribbon centre stripes, calling in every instance for one

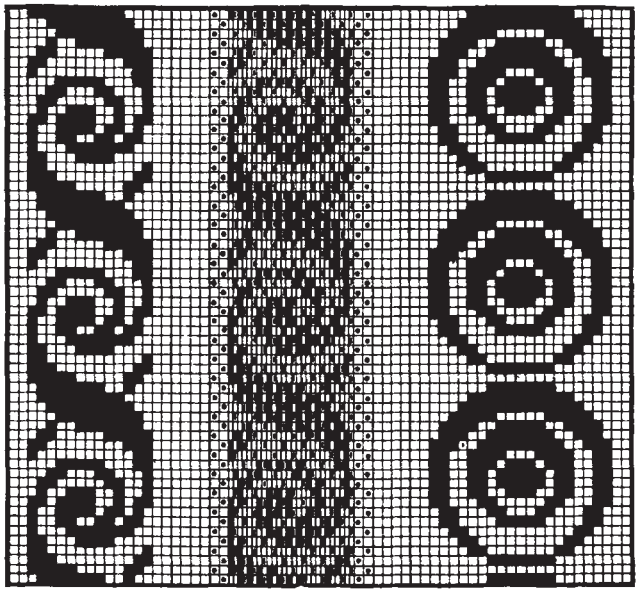

Fig 183 *Fig. 184* *Fig. 185*

system of figure warp used in connection with the regular system of ground warp, whereas designs Figs. 199, 200 and 201 call for two systems of figure warp used in connection with the regular ground warp. One system of filling is called for in every instance. These stripe effects refer to similar figure warp-threads as are shown in weave Fig. 182 to occupy then five rear harnesses 12 to and including 16; the new collection

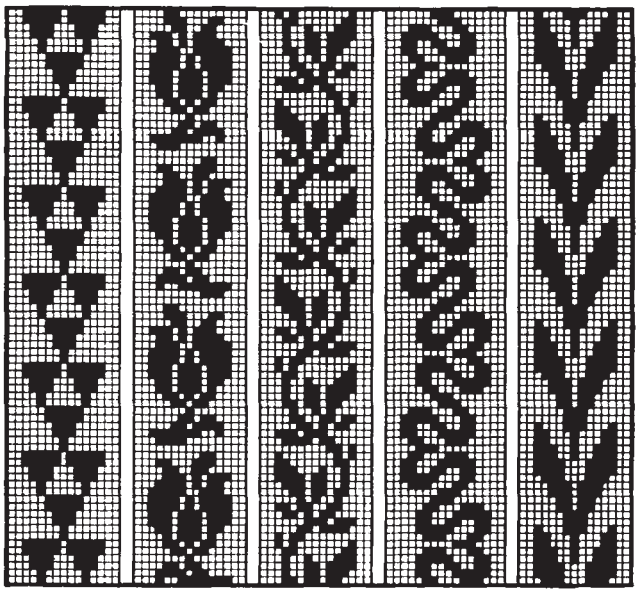

Fig. 186 *Fig. 187* *Fig. 188* *Fig. 189* *Fig. 190*

will require more than five harnesses in the loom. Suitable plain or figured work (single cloth) is to be provided for each side of each figure stripe (not shown in designs Figs. 183 to 201) the same as were used in connection with weave Fig. 182, respectively then the plain, twill and rib weave. Other weaves may be used in place of the twill and rib weave shown, the plain weave to be always more or less retained.

Fig. 183 shows a stripe effect calling for 13 warp-threads and 20 picks in repeat of pattern. *Full* squares show the floating of the extra warp on the face of the fabric.

Fig. 184 shows the analysis for design Fig. 183, *i.e.,* the plan for the interlacing of ground and figure warp-threads with its filling.

The plain weave has been selected for interlacing the ground structure (see *dot* and *dash* type) *dot* type being used where no figure warp comes under consideration in the construction of the fabric, whereas *dash* type is used where one figure warp-thread alternates with one ground warp-thread to produce the design. To retain the effect of the design in the fabric in its corresponding shape in our analysis Fig. 184, we prepared the point paper for this figure warp by dividing each square lengthways in half so as to imitate its fabric texture.

Suppose texture of ground warp and filling is 80 by 80, then in every instance where the extra warp comes into consideration the proportion of the texture in that part of the ribbon changes to 160 by 80.

Fig. 183 is the working design. The weave for the ground cloth (the plain weave in this instance) is built direct on the harness chain and distributed by means of the proper drawing-in draft used over the lay-out of the ribbon in the loom, as was done previously in connection with weave Fig. 182[a] by means of drawing-in draft *b* and considering harness chain *c*. The figure calls for 13 warp-threads in its repeat, and since every thread interlaces different, requires 13 harnesses for its execution on the loom.

The weave for the ground cloth calls for 2 or 4 harnesses; using (preferably) the latter number so as to more equalize the number of warp-threads for each harness gives us 17 harness for weaving the complete fabric on the loom, provided no outside fancy effect, *i. e.*, another weave or weaves than the plain is or are added.

Design Fig. 183 may be used as a small single stripe effect, or in connection with wider ribbons two of them may be used as one stripe. Again the position of the second effect then can be reversed, *i. e.*, the design turned over by means of using for it (the second effect) a point draw (without increasing the number of harnesses) producing in turn another combination of a stripe effect.

Fig. 185 has for its repeat 19 warp-threads, calling for a 9-harness point draw with 3 ends alike for the point. If using two of these effects side by side for one stripe effect in the ribbon, you may *drop* the second effect 10 picks. This will call for 9 additional harnesses, *i.e.,* 18 harnesses would be required for the combination stripe, plus the 2 or 4 harnesses for the plain weave for ground, or any other weave that you care to use.

We will now briefly refer to the other designs.

Fig. 186: Repeat 11 warp-threads calling for a 6 harness point drawn on the loom.

Figs. 187 and 188: Repeat 11 warp-threads, calling for a straight draw of 11 harness on the loom.

Fig. 189: Repeat 12 warp-threads, straight draw.

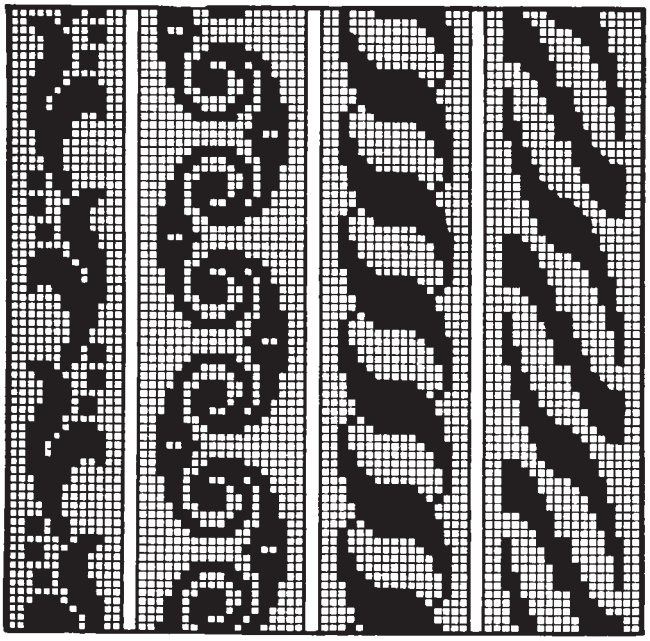

Fig. 191 *Fig. 192* *Fig. 193* *Fig. 194*

Fig. 190: Repeat 11 warp-threads, 6 harness, point.

Fig. 191: Repeat 9 warp-threads, straight.

Fig. 192: Repeat 15 warp-threads, to be preferably drawn on 15 harness straight, or if necessary on 14 harness, by drawing twice in rotation on harness 7.

Fig. 193: Repeat 13 warp-threads, to be drawn on 9 harness, drawing five times in rotation on harness 5.

Fig. 194: Repeat 14 warp-threads; can be drawn on 13 harness if this is necessary, by drawing two ends in rotation on harness 7.

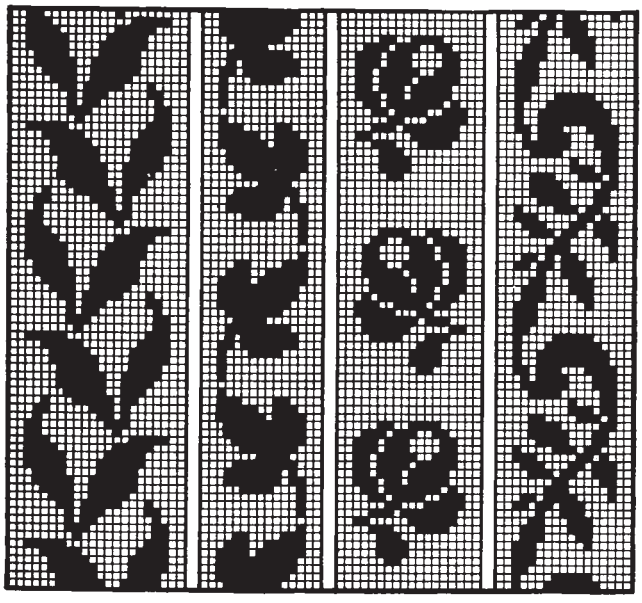

Fig. 195 *Fig. 196* *Fig. 197* *Fig. 198*

Fig. 195: Repeat 18 warp-threads, straight.

Fig. 196: Repeat 11 warp-threads, straight.

Fig. 197: Repeat 14 warp-threads, straight.

Fig. 198: Repeat 13 warp-threads, straight.

Fig. 199 shows us a two color effect in part of the design; one color of the figure effect is shown by *full* type, the other by *shaded* type.

Fig. 200 is an analysis showing the interlacing of both systems of figure warp with its ground warp. So as to again keep the analysis conforming in its general appearance to that of Fig. 199, the vertical rows of squares on the point paper were ruled off in their centre wherever one figure warp-thread (only) came into consideration, whereas where two figure warp-threads (see *black* and *shaded* squares on one vertical row of squares on design Fig. 199) come into consideration we then divided the respective square of the regular point paper lengthwise into 3 parts, the original square thus taking the place of 3 warp-threads (one ground, one figure color #1, one figure color #2).

Considering the analysis in detail we find the following arrangement used for the warp:

2 warp-threads shown by *dot* type interlace single cloth with the plain weave.

The next 6 warp-threads show figure and ground

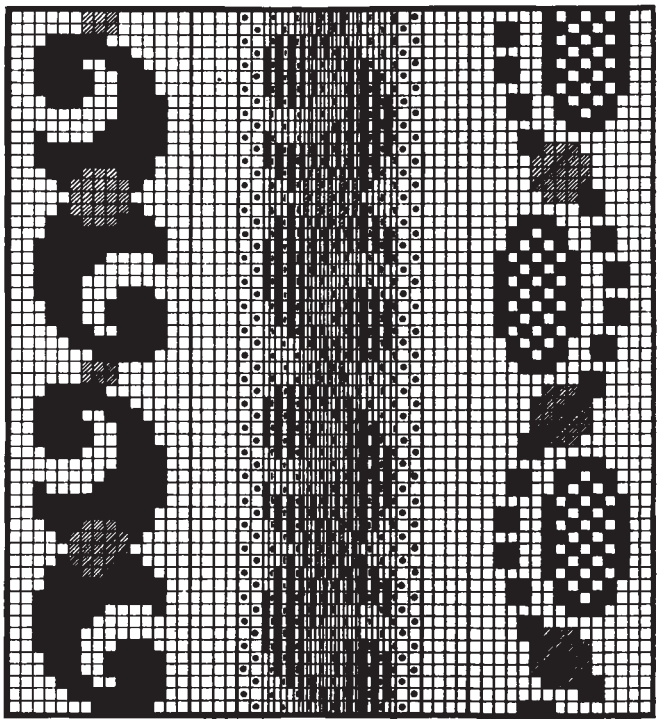

Fig. 199 *Fig. 200* *Fig. 201*

warp arranged 1: 1; see *full* and *dash* type respectively.

The next 15 warp-threads show two sets of figure warp-threads working as mates to one ground warp-thread. Figure warp-threads are shown by *full* and *shaded* type, ground warp-threads by *dash* type. It will be readily seen that where *full* type is up, its mate (*shaded*) thread is down and vice versa; in some instances both colors are down and then the ground warp (see *dash* type) takes the place of the face of the fabric, interlacing with the filling on the plain weave, both figure warp-threads then floating on the back of the structure.

Fig. 201 shows another effect produced partways with two colors besides the ground structure, shown by the same arrangement of type as in design Fig. 199, and when explanations before given also refer to this design.

(To be continued.)