

side by side on the floor and properly matched, or what is better yet, put four breadths side by side on the floor and you will then have two repeats of the pattern before you. As will be readily understood, this drop plan of the plain setting only refers to carpet designing, *i. e.*, fabrics with one repeat to the width of the fabric in the loom, and where then, by means of the drop pattern, the repeat is extended to twice the dimension, width ways; it has nothing whatever to do with Jacquard designing for dress goods, cloakings, table covers, etc., and where more than one repeat of the pattern, side by side, is produced on the loom.

THE MANUFACTURE OF RIBBONS, TRIMMINGS, EDGINGS, ETC.

(Continued from October issue.)

THREE SYSTEMS WARP AND THREE SYSTEMS FILLING.

Fig. 175 shows us a portion of a point paper design constructed in this manner and Fig. 176 a portion of its analysis, *i. e.*, plan necessary to be prepared, to either cut from it Jacquard cards or build harness chain for dobbie.

Fig. 175 illustrates figuring with two extra systems of warp and two extra systems of filling, upon a fabric interlaced otherwise with a ground warp and filling.

First figure warp is shown by type shaded from right to left (\).

Second figure warp is shown type shaded from left to right (/).

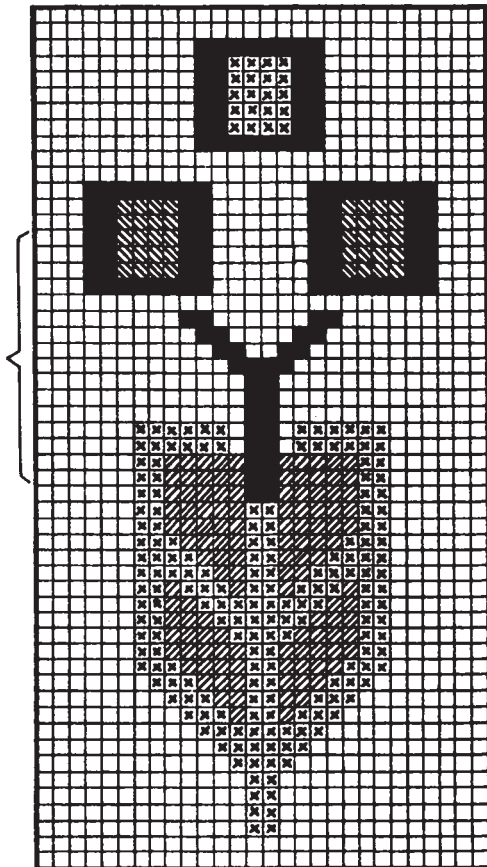


Fig. 175

First figure filling is shown by *full* type.

Second figure filling is shown by *cross* type.

The design is prepared by painting all the different figure picks (to be inserted between two ground picks) on one horizontal row of squares of the design. In the

same way paint all figure warp-threads as resting between two ground warp-threads, upon its respective vertical row of squares.

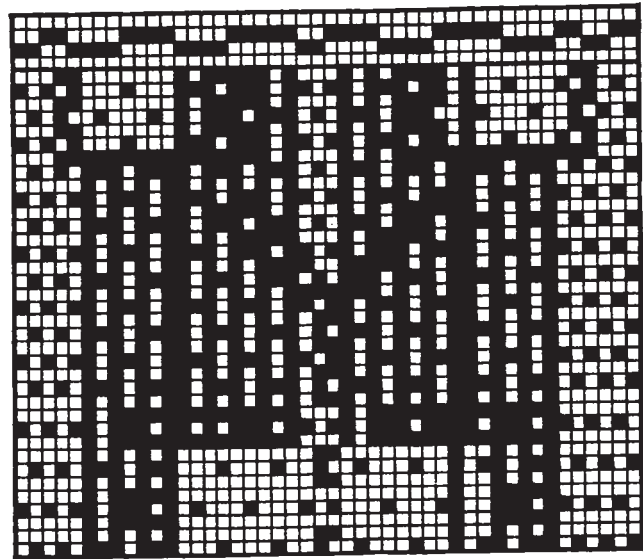


Fig. 176

Analysis Fig. 176 illustrates the method of interlacing of the 16 lines indicated by the bracket, shown on the left hand side of the design Fig. 175, calling, in its repeat, for the two figure effects, both in warp and filling.

The plan observed in the analysis Fig. 176 is to weave *face down* in the loom. For this reason the formation of the various parts of the design by means of the figure picks, is done by means of raising the respective warp-threads, floating the filling below them; the figure warps, in turn, form parts of the design by means of sinkers in the analysis, *i. e.*, the weave, floating below the picks when so called for by the design.

Above the analysis, the entering of the warp-threads in the reed is shown, the same being thus: 2, 2, 4, 4, 4, 5, 2, 4, 4, 5, 4, 2, 2, 2.

To simplify matters for the reader illustration Fig. 177 has been specially prepared, the same being a duplicate of analysis Fig. 176, executed in crochet type to correspond with design Fig. 175.

In the same the two different filling floats (face down in the loom) are shown by the respective raisers of the warp, being shown in different type, *viz.*, *full* type for one color and *cross* type for the other color. With reference to the two warp effects floating below all filling (*i. e.*, sinkers in the analysis, Fig. 176) the same have been shown in illustration Fig. 177 by type corresponding to the one used in design Fig. 175. See type shaded respectively either / or \. This procedure (*i. e.*, indicating raisers and sinkers for a given design) will give us in illustration Fig. 177 the design, as is produced face down in the loom, shown in colors to correspond to such as used in Fig. 175.

Remember that:

Full type shows portions of the design produced by means of raisers, by one of the figure picks.

Cross type shows portions of the design produced by means of raisers, by the other figure picks.

Shaded (\) type shows portions of the design produced by means of sinkers, by one of the figure warps.

Shaded (/) type shows portions of the design produced by means of sinkers, by the other figure warp.

Remember that both kinds of *shaded* type in illustration Fig. 177, with reference to weaving, *i. e.*, interlacing of warp and filling, refer to sinkers, *i. e.*, *empty* type in analysis Fig. 176.

Thus with reference to illustration Fig. 177, if considered as a weave, read:

Shaded and *empty* type to be sinkers.

All other style or type (*full, cross, large* and *small dots*) to be raisers, and when you obtain duplicate of analysis or weave Fig. 176, shown there in two kinds of type only, *viz.*:

Full type for raisers.

Empty type for sinkers.

The *gammat*, *i. e.*, the plan of arranging the threads as they interlace for the warp is shown on top, and that for the filling at the right hand side of Fig. 177.

The dressing of the warp, according to the gammat, is thus:

- 4 ends ground warp
 - 1 end ground warp
 - 1 " figure warp #1
 - 1 end figure warp #2
 - 1 " ground warp
 - 1 end ground warp
 - 1 end ground warp
 - 1 " figure warp #2
 - 1 end ground warp
 - 1 end figure warp #1
 - 1 end figure warp #2
 - 1 end ground warp
 - 1 " figure warp #1
 - 6 ends ground warp
- } 4 times
- } 5 times
- } 4 times
- } 3 times

46 ends in pattern

The arrangement of the filling, according to its gammat, given on the right hand side of illustration, reading from bottom upwards, is thus:

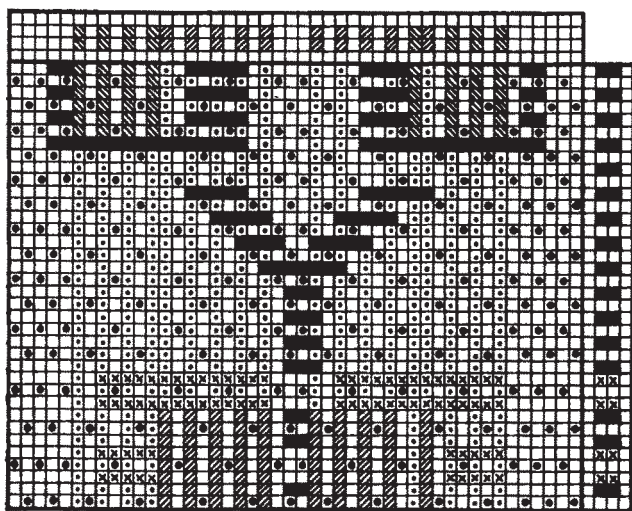


Fig. 177

- 1 pick ground
 - 1 " figure #1
 - 1 " figure #2
 - 1 " ground
 - 1 " figure #2
 - 1 " figure #1
 - 1 " ground
 - 1 " figure #1
- } twice
- } 12 times

36 picks given in illustration

The weave for the ground structure is the taffeta, see *large dots*. The *small dots* indicate the raising of the two systems of figure warp on any portion of the design where not required to be shown on the face of the fabric structure, which, as mentioned before, in this instance, is woven face down in the loom.

With certain fabrics (galloon-laces, which after weaving are then cut out) requiring several shuttles, we may prefer to weave them face up. In connection with such fabrics, as a rule, entering threads are placed at the cut line, and to have these prominently in view of the weaver, such fabrics are then woven face up in the loom.

Novelty in Ribbon.

The accompanying illustration is a plan view of a



piece of the ribbon, illustrating the new design, just patented by John Grossgebauer of Paterson, N. J.

The design consists of representations of doves holding in their bills an olive branch or festoon.

Designs for Lace Edgings.

The accompanying two illustrations are plan views of portions of lace edgings showing two new designs, patented by Carlos Strickhouser of Philadelphia.



The same comprise in each case a tip or border of peculiar configuration, the marginal loops of which form parts of elliptical shaped rings which extend within the tip or border and unite the same with the opposite sewing-on edge.