

POINTS ON JACQUARD DESIGNING.

(Continued from August issue.)

Fig. 14 illustrates in its repeat two different figures set on the plain motive. A third figure, rings *c, f, g*

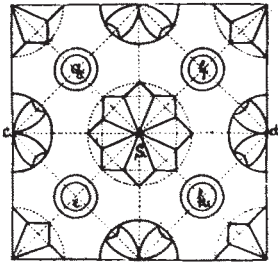


Fig. 14

and *h* are added to kill the empty spaces, imparting to the design a somewhat more pleasing effect. This illustration also explains the designing for the point tie-up principle, *i. e.*, the working design requires to be made for only half the width of the design from *c* to *S*, the Jacquard machine and harness producing the other half, from *S* to *d*, by means of the Jacquard harness being tied up on the point tie-up principle, in turn doubling the range of the Jacquard. Thus if, for example, Fig. 10 calls for a 400 Jacquard machine, Fig. 14 will only call for a 200 machine.

Plain Setting on the Rectangle.

A specimen of this setting is shown in Fig. 15 and which in its main effect contains the same figure as well as the same setting as shown in Fig. 13, the difference being that in the present instance, the figures have been dropped further apart (in the direction of the filling) from each other than in the previously given example, giving us in turn more ground at our disposal, which with fabric sketch 15 we have then filled up with an all-over ground effect pattern, shown shaded. This setting on the rectangle (as shown) gives the designer an opportunity to produce more elaborate designs compared to that on the diamond, and this without increase of the capacity of the Jacquard machine.

Plain Setting on the Drop.

This system of setting (*i. e.*, distributing) figures,

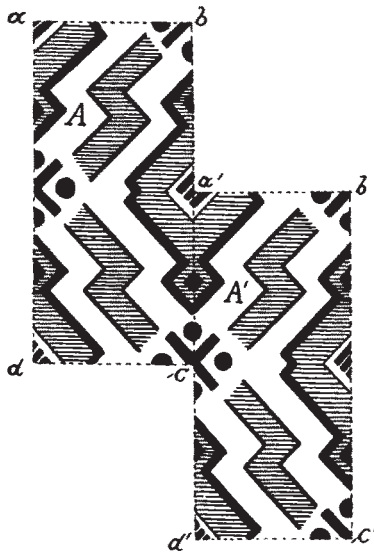


Fig. 16

better known as *Drop Patterns*, is mostly used in connection with carpets. Fig. 16 explains the subject, and in which *a — b* is to represent one breadth of the fabric on the loom, the rectangle *a b c d*, representing one repeat of the pattern as then woven on the loom.

To get the repeat of the pattern on the floor, for example in connection with a carpet, this is accomplished by means of matching every other width to the one joining it, *i. e.*, every other width has to be dropped before it will properly join (see rectangle *a b c d* compared to rectangle *a' b' c' d'*), and which consequently has been the origin of the name (drop pattern) given to such designs (*A* dropped to *A'*); however, considered as a whole, on the floor they will be simply nothing else but a plain setting of a pattern.

The characteristics of these designs are that the squares, or rectangles, as the case may be, in opposite corners of the complete design on the floor must contain exactly similar parts of the figure, *i. e.*, must cor-



Fig. 15

respond, in order to permit the characteristic drop previously referred to—see *A* and *A'*.

As mentioned before, the most advantageous use of the drop pattern is in connection with carpets, more particularly Brussels and tapestry carpets, and which are manufactured in what is known "by the roll", their standard width in connection with both makes being 27 inches, and when by using the *drop* arrangement, in connection with the plain setting, it then is possible to make the full width of the repeat equal to twice the width of the carpet in the roll, *i. e.*, the repeat of the pattern to be $(27 \times 2 =) 54$ inches wide on the floor.

It will be readily understood that these patterns, when viewed on the roll, *i. e.*, single breadth, do not show the repeat width ways, although they show it length ways in one roll. To see the full repeat, it then is required that two breadths of the carpets are laid

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 (/).

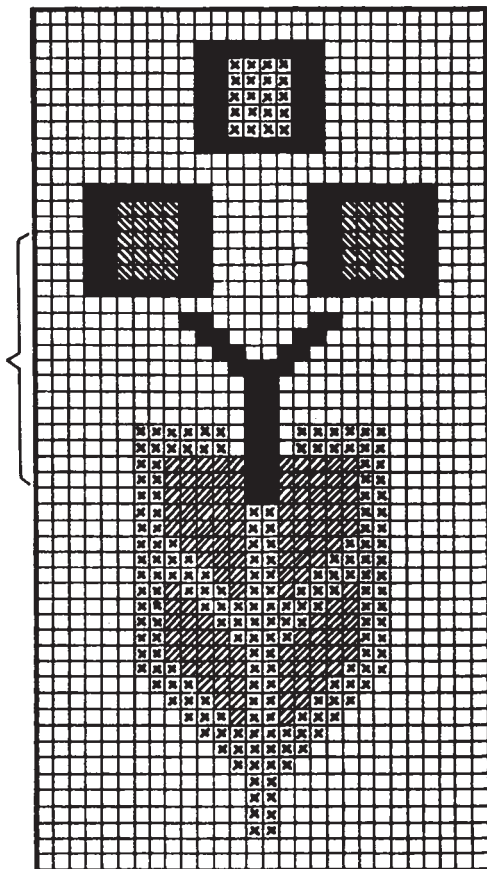


Fig. 175

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.

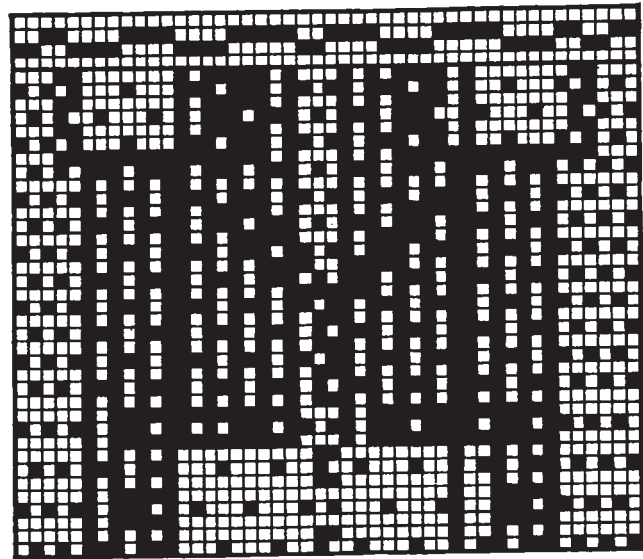


Fig. 176

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.