

THE JOURNAL'S TEXTILE SCHOOL.

JACQUARD DESIGNING.

Lesson 3.

We now come to consider the principles employed for the setting of textile designs and which are: the "plain setting" in all its varieties, comprising setting on the "square," the "diamond," the "rectangle," the "drop" as they are variously named; the "turn-over" or "point setting," and the various "satin settings." **Plain setting:** In some instances, in connection with plain setting, we meet with designs worked out on the full repeat, *i. e.*, one figure with its details covering one repeat of the pattern, and what is known as "setting on the square," such arrangement, however, as a rule, giving unsatisfactory results, as compared to the other plans of plain or the satin settings; this more particularly being the case, when one part of the figure is more conspicuous than other portions and when then in turn, the repeat of the pattern, on the loom, causes these prominent figures to form lines, either horizontally or vertically or both ways, or in an oblique direction in the fabric.

Fig. 8 shows us a figure set on the "plain setting principle," set on "the diamond" plan, *i. e.*, using two figures in one repeat of the pattern. The figure, being set in both instances (in the repeat of the pattern) in the same position, in turn has a tendency, in this instance, to show stripes in a diagonal *i. e.* oblique direction, a feature readily overcome by means of reversing the position of the two figures as forming the repeat of the pattern.

This has been done in connection with design Fig. 9, and where one of the figures (see the one in the left hand lower corner) is shown in the same position as in the previous design, the other figure, in the repeat of the pattern, having been reversed, *i. e.*, turned over, a feature which in turn cannot help but result in a better design all around; this reversing of one of the figures in connection with the plain setting (neither after the diamond or rectangle plan) always resulting in a better effect in the fabric, a feature readily grasped by the student by comparing illustrations Figs. 8 and 9 ("plain setting—diamond plan") with each other.

Fig. 10 shows the same figure as shown in connection with design Fig. 8 produced under the same conditions, *i. e.*, both figures in one repeat of the pattern being set in the same position, which setting however, in the present instance, is different from the one shown in connection with Fig. 8, the figure itself being placed in a different (a more verticle) position, overcoming in this instance considerably the disadvantage of showing oblique, *i. e.*, diagonal lines in the woven fabric. Still, considered all around, the reversing of figures, as has been shown in connection with Fig. 9, will always produce the best effects in fabrics, and consequently is the one most generally employed for that purpose, however, the arrangement given in

connection in Fig. 10 shows a well repeating pattern, with little, if any, tendency for striping; again, the arrangement shown in connection with Fig. 8, in some instances, may refer to a special effect, more particular aimed at by the designer.

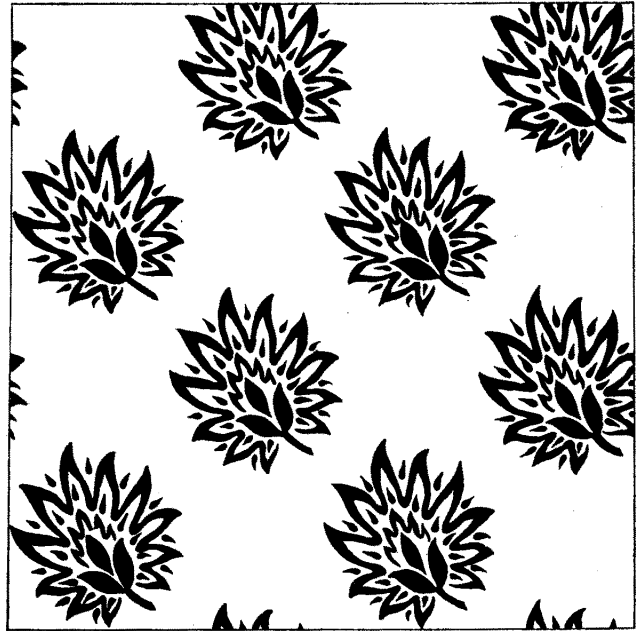


FIG. 8.

Previously we mentioned, that the repeat of the design, width ways in the fabric, is always regulated by means of the texture of the fabric as well as the

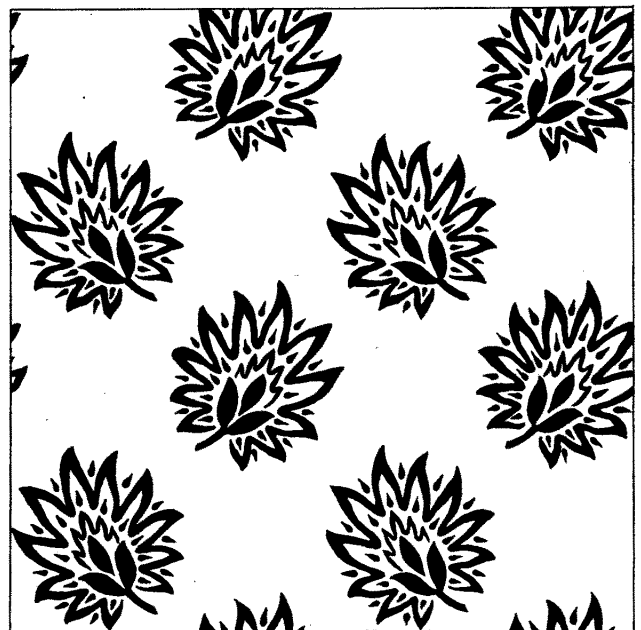


FIG. 9.

compass of the jacquard machine, whereas, in connection with the same fabric, the repeat of the design length ways, is unlimited, a feature which without question is the cause why a great many of our designs set on the plain setting, have a longer repeat filling ways than warp ways, (a stretched diamond, *i. e.*, the rectangle plan) giving in turn the designer a chance to bring up more elaborate designs.

To illustrate the subject, Fig. 11 is given, and which in its main effect contains the same figure as well as the same setting of it (plain setting reversed) as had

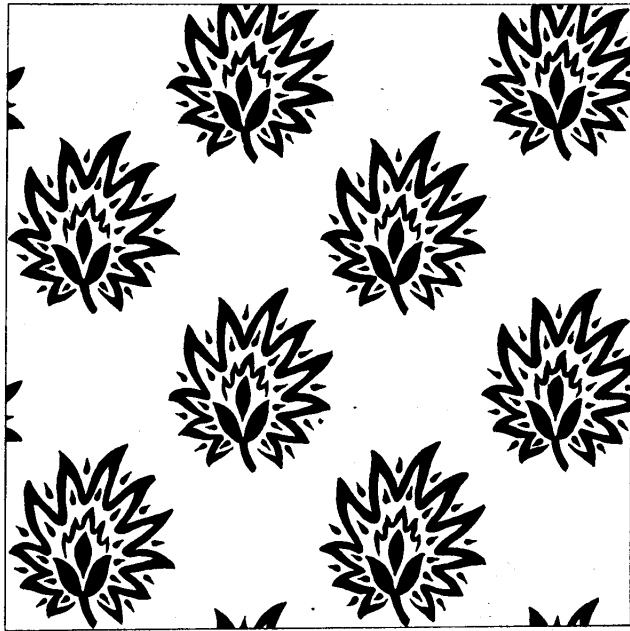


FIG. 10.

been given in connection with Fig. 9, the difference however being, that in the present instance, the figures have been dropped further apart from each



FIG. 11.

other than in the previously given example, giving us in turn more ground at our disposal, which in turn, with fabric sketch Fig. 11, we have then worked up in connection with a special design shown in a shaded effect.

Having referred to the square, the diamond as well as the rectangle plan of the plain setting, it will be well to refer also to what is called the "drop plan," in connection with plain setting; for the fact that it is a term frequently met with, more particularly in connection with carpets and similar fabrics.

The subject will be best explained with an illustration, and for which reason Fig. 12 is given, 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.

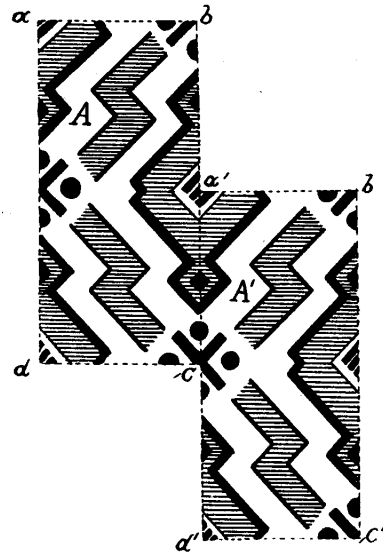


FIG. 12.

To get the repeat of the pattern on the floor, for example in connection with a carpet, is then accomplished by means of matching every other width to the one joining it, *i. e.*, every other width has to be dropped before it properly will join, (see rectangle $a b c d$ compared to rectangle $a^1 b^1 c^1 d^1$), and which consequently has been the origin of the name, drop pattern given to such designs (A dropped to A^1); 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 correspond, in order to permit the characteristic drop, previously referred to—see A and A^1 .

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., etc., and where more than one repeat of the pattern, side by side, is produced on the loom.

(*To be continued.*)
