FIGURING WITH DOUBLE PLAIN REVERSIBLES.

(Continued from page 61.)

3-Ply Reversibles.

In the same manner as we explained the card

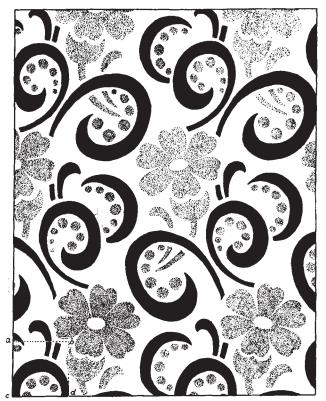


Fig. 10

stamping in connection with a 400 Jacquard machine for 2-ply reversibles, designs for 3-ply reversibles may

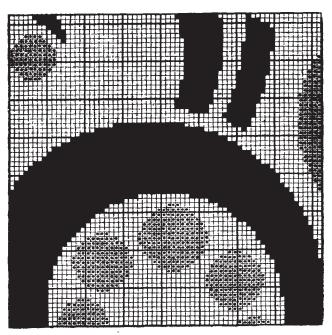


Fig. 11

be executed without an analysis on a Jacquard harness tied up single section, provided we deal with a

12 row machine, i. e., a 600, 900 or a fine index (1304 needles) Jacquard machine.

Fabric sketch Fig. 10 is given to illustrate the subject, the three different ply fabric structures being shown respectively by White for ground, Black for figure effect #1 and Mottled for figure effect #2.

Fig. 11 shows one-third of the design (see left hand lower corner—square a, b, c, d) widthways, i. e., 66 lines, executed on point paper, the same representing $(66 \times 3=)$ 198 warp threads in the loom. Lengthways (warp and filling texture considered balanced) the complete point paper design will call for 384 lines=1152 picks in its repeat, 66 lines or 198 picks of which are shown in Fig. 11.

Type in point paper design corresponds to effects in sketch Fig. 10 thus:

White in sketch=white in point paper design;
Black " " =black " " " ";
Mottled " " =dot " " " ".

Black type as shown in illustration means "paint red," and dot type in the same way "paint blue," for the designer.

RULE FOR CARD STAMPING.

Three cards (marked respectively a, b and c) have to be cut for each horizontal line of squares of the point paper design (not shown) viz:

Cut on the Royle Repeater the $\frac{1}{5}$ 6-harness twill successively on every card required for the complete set. Next cut the design thus:

Card marked a: Cut upon rows 2, 5, 8, and 11, red and white, and upon rows 3, 6, 9 and 12, white only.

Cards marked b: Cut upon rows 1, 4, 7 and 10, blue only, and upon rows 3, 6, 9 and 12, blue and white.

Cards marked c: Cut upon rows 1, 4, 7 and 10, blue and red, and upon rows 2, 5, 8 and 11, red only.

Although this method of cutting cards is always more or less troublesome, yet in many instances it is to be preferred to the heavy expenses of re-tying the Jacquard harness.

BLEACHING ARTIFICIAL SILK.

After denitration, artificial silk has generally a greenish tint, however thorough the rinsing may have been, and is also deficient in lustre. It must be bleached and lustred. For the bleaching the usual processes for cotton bleaching are employed, with the exception that the baths must be more dilute. The cellulose of artificial silk is far more readily converted into oxycellulose than the cellulose of cotton, and the artificial silk is weak enough already. The use of bleaching powder is charged with particular danger in the case of artificial silk. However carefully the process may have been carried out, the goods are nearly sure to become yellow in a month or two. The artificial silk has such an affinity for chlorine that no rinsing that can be carried out within a reasonable time, even if antichlor is used, suffices to avoid this danger. The use of very strong solutions of antichlor (bisulphite) at an early stage does certainly prevent vellowing, but solutions of the necessary strength tender the already weak material to a very considerable extent. Hence it is necessary to rely on peroxides for bleaching artificial silk.

Fancy Worsted Vestings. Spun Silk Effect.

These fabrics are constructed with an endless variety of weave combinations, most frequently showing small spots in bright, contrasting colors, well distributed over the face of the fabric, otherwise interlaced with a fancy weave.

These spots are produced by an extra system of filling in combination with single or double cloth structures.

Fig. 1 shows a specimen of a vesting, constructed with an extra system of filling in addition to a single cloth structure, *i. e.*, using one system of warp and two systems of filling in the construction of the fabric.

The spot is shown distributed after the *plain setting*, and produced in two colorings by having sets of picks of one color (see white spots) alternate with sets of picks of another color (see joining spots shown in gray).

Fig. 2 shows the weave required for producing the fabric structure, repeating on 48 warp threads and 70 picks.

This shows us that matter refers to Jacquard work; a 400 machine, straight through tie up, using 48 rows of the machine, i. c., 384 needles.

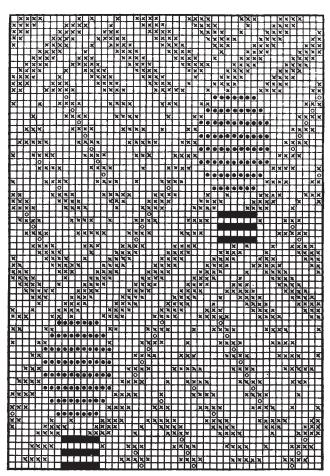


Fig. 2

In card stamping, cut the weave Fig. 2, repeating on 48 warp threads, 8 times over $(48 \times 8 = 384)$. Weave Fig. 2 is shown face down, i. e., cut empty

squares or white, all others missed. This has been done to show spotting effect more distinctly to the

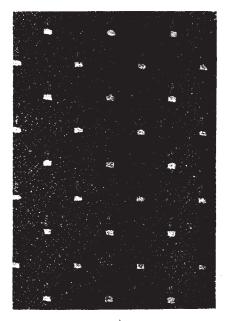


Fig. 1

reader than if painting risers.

WARP: 78 ends per inch in finished fabric. 2/30's worsted black.

FILLING: 72 ground picks (2/30's worsted black) per inch finished fabric; fancy picks additional.

Arrangement of Yarns and Colors in Filling:

1 end 2 fold 30/2 spun silk, blue

3 ends 2/30's worsted, black

1 end 2 fold 2/60's black mercerized cotton

1 " 2/30's worsted, black

1 end 2 fold 2/60's black mercerized cotton

12 ends 2/30's worsted, black

35 ends in repeat of pattern, with two patterns, *i. e.*. 70 picks to the repeat of the design.

Cross type in Fig. 2 refers to the weave, i. e., interlacing of the single cloth structure, being a fancy twill repeating on 48 warp threads and 48 picks.

Full type indicates the floating of the blue spun silk on the face of the fabric.

Dat type indicates the floating of the black mercerized cotton on the face of the fabric.

Circle type shows the stitching of both the silk as well as the cotton, figure picks (not visible on the face, i. e., stitching between two sinkers).

In place of the blue spun silk and the black mercerized cotton any other fancy yarns or colors may be used. In connection with photographic view of woven fabric Fig. 1 and explanations given, remember that any bright blue takes white.

The silk crop of China this season is said to be 20 per cent larger than last year, and while the color is not so good the opinion is general that the quality of the cocoons is slightly better. Prices are somewhat lower. The market for buving silk cocoons opened at Wusieh, China, on June 1.