

FAR EAST. China and Japan.
 AMERICA. Peruvian tapestry work.

The Chinese Minister has informed the Committee that he will be present at the Convention on its second day. This is the day on which raw silk problems will be discussed, and a very excellent program has been arranged for the reception of the Chinese Minister and other dignitaries who will be present.

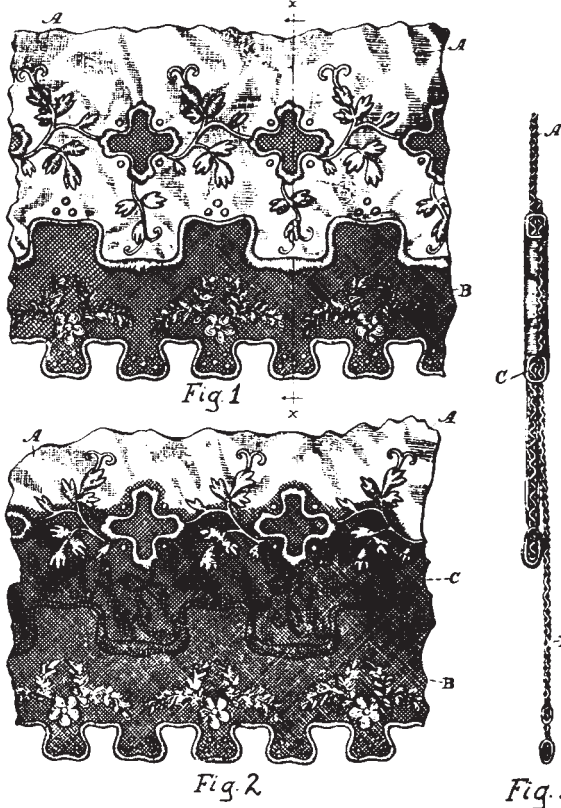
There will be a question box at the Convention. It is proposed by this question box to care for all questions not brought out in the papers now in the program. Questions received through the medium of the question box will be referred to the Program Committee. They will then, in the nature of their importance, be referred to the Convention. A Resolution Committee will take care of all matters not decided at once by the Convention.

Sessions will be held in the City Hall in the afternoons of Tuesday, October 12, and Wednesday, October 13; also in the morning and afternoon of Thursday, October 14. The evening sessions of Tuesday and Wednesday will be held in the Lyceum Theatre.

NEW EMBROIDERED FABRIC.

By J. Schwarz.

The same is shown by the accompanying illustrations, producing a very fine effect in embroidery. In these, Fig. 1 shows the face of the fabric, Fig. 2 the back and Fig. 3 a cross section on line x — x of Fig. 1.



To produce the fine and novel effect previously referred to, two fabrics are used, one the body fabric *A* made of closely woven cloth, the other an edging cloth *B*, preferably of net or open mesh, both fabrics being suitably ornamentally embroidered.

The edging or border cloth underlies the body cloth and is attached at its upper portion *C* to the latter, by the embroidered figures. The lower portions of both fabrics are preferably scalloped and over-edged by embroidery stitches.

The two fabrics being joined above their overlapping, render the fabric soft and pliable, and allow movement to the lower portion of the fabric when used on a dress or other garment.

FABRIC ANALYSIS.

(Continued from August issue.)

Example: Ascertain Warp and Filling texture of **Worsted Trousering** shown in Fig. 15, actual size reproduction.

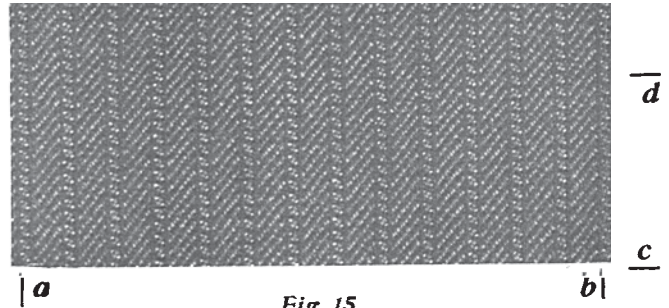


Fig. 15

WARP CALCULATIONS.

Pick-out, obtained and shown in Fig. 16 gives us the following arrangement of warp-threads for one repeat of the pattern.

- 2 ends black (full type).
- 1 end light gray (dot type).
- 2 ends medium gray (shaded type).
- 1 end light gray (dot type).
- 2 ends black (full type).
- 10 ends lt. and med. gray tw. (cross type).
- 18 ends repeat of pattern.

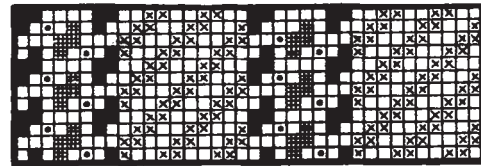


Fig. 16

a to *b*, below fabric, shows a distance of 3 inches, the same containing 13 full repeats of the pattern or (13 × 18 =) 234 ends.

$234 \div 3 \text{ inches} = 78 \text{ ends per inch Ans.}$

Dealing with a fabric 56 inches wide, this will mean (78 × 56 =) 4368 ends for warp to use.

FILLING CALCULATION.

Distance of *c* to *d*, on side of fabric Fig. 15, is one inch. The main weave used in the construction of weave Fig. 16 is the 2 up and 2 down 4-harness twill. Using a light warp in connection with a black filling clearly reveals the twill lines in the sample and of which there are 16 in the distance *c* to *d*, or in one inch, hence (16 × 4 =) 64 picks per inch in finished sample.

Example:—Ascertain warp and Filling texture of **Woolen Trousering** shown in Fig. 17 in actual size reproduction.

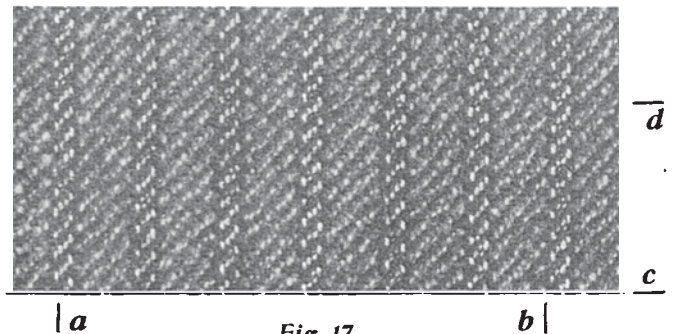


Fig. 17

WARP CALCULATIONS.

Pick-out has shown us that the weave used was the 4-harness cassimere twill, and that the arrangement of the pattern used is:

- 1 end spun silk, white
- 2 ends black worsted and silk tw.
- 1 end spun silk, white
- 1 end wool, black
- 10 ends wool, gray and white tw.
- 1 end wool, black

16 ends, repeat of pattern.

Distance of *a* to *b*, below fabric, shows six repeats of the pattern, covering $2\frac{1}{4}$ inches. 6 repeats = 96 ends.

$96 \div 2\frac{1}{4} = 37\frac{1}{4}$ ends (practically $37\frac{1}{2}$) in proportion to one inch. *Ans.*

Dealing with a fabric 56 inches wide we find:—

$$37\frac{1}{4} \times 56 = 2098 \text{ threads required for complete warp.}$$

FILLING CALCULATION.

Distance of *c* to *d*, on side of fabric sample, is one inch, showing 9 interlacings of the 4-harness twill, hence $(9 \times 4 =)$ 36 picks per inch in finished sample.

We will next deal with a sample, where the number of warp-threads in proportion to one inch can only be obtained from the design of the fabric by calculation, the fabric itself being constructed with two different textures.

Silk Waisting.

Fig. 18 shows the reproduction of the fabric, actual size; a neat floral stripe effect upon a plain striped ground. Examining the sample by a single microscope or a pick-glass gives us the following data as to arrangement of the warp-threads used:

- 30 ends white, ground, plain.
- 72 ends, one end dark to alternate with one end white; the 36 ends dark are used for the floral stripe, the white ends interlacing plain.
- 30 ends white, ground, plain.
- 114 ends, 9 ends dark to alternate with 12 ends white, forming the six small stripes on the plain ground effect of the pattern.

246 ends in repeat of pattern.

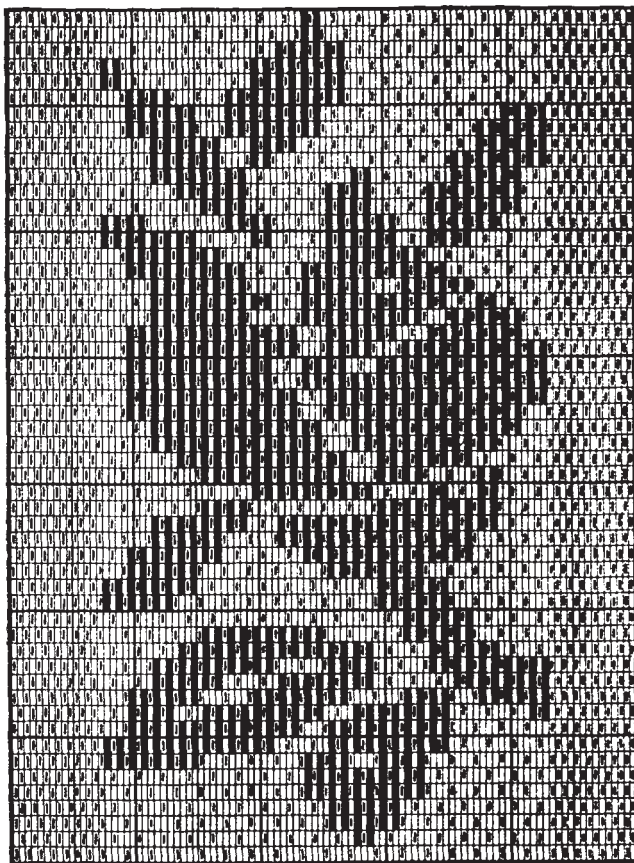


Fig. 19

Fig. 19 shows the interlacing, *i. e.*, pick-out as we can call it, of one of the floral figures used in the stripe; show-

ing also some of the joining plain ground on either side, and of which there are 175 threads in the complete repeat of the weave, in place of the 29 shown.

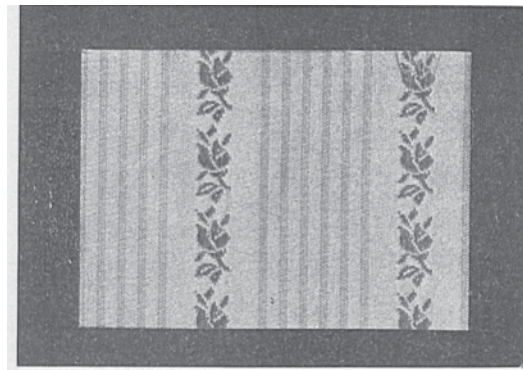


Fig. 18

WARP CALCULATIONS.

Considering widthways one repeat of the design in sample Fig. 18, we find the same to measure $1\frac{1}{8}$ inches, hence:

$$246 : 1\frac{1}{8} :: x : 1 \text{ and}$$

$246 \div 1\frac{1}{8} = 231\frac{1}{8}$ (practically $231\frac{1}{2}$) warp-threads (considered in an average) per inch. *Ans.*

If dealing with a fabric 20 inches wide finished, the same then will call for 4630 warp-threads.

FILLING CALCULATION.

Three repeats of pattern in floral stripe, according to fabric sample shown in Fig. 18, call for $1\frac{1}{4}$ inches. Each pattern, according to pick-out Fig. 19, calls for 56 picks, hence $(3 \times 56 =)$ 168 picks are contained in $1\frac{1}{4}$ inches of fabric, giving us in turn $(168 \div 1\frac{1}{4} =)$ 134 picks per inch, in unfinished sample. *Ans.*

Effects of Singeing on Weighted Cotton.

The influence of magnesium and zinc chlorides on the tendering of cotton cloth during the operation of singeing formed the subject of an interesting Paper read by Mr. Thomson before the Manchester Section of the Society of Dyers and Colorists.

Mr. Thomson called attention to the fact that on examining certain cloths which had been subjected to the singeing operation, he noticed that some had become tender while others remained sound.

On testing these it was found that some of those which remained sound contained the same quantity of chlorides as those which had become tender.

On further examination it was ascertained that those which had become tender contained either magnesium or zinc chloride alone, while the ones which remained undamaged contained a mixture of the two.

Experiments were then made by taking 5 per cent solutions of the two salts (the anhydrous salts) and then mixing equal quantities of these solutions together and putting a drop of each on a piece of cloth, and placing a hot flat-iron over them.

It was noticed that either salt separately caused distinct charring of the cloth, while the mixture of the two was free from discoloration, or only very slightly discolored. The 5 per cent solution of zinc chloride commences to char first (at a lower temperature than the magnesium chloride).

Mr. Thomson concludes therefore that it may be taken that there is less chance of causing damage to the cloth in the singeing operation when the fabric contains a mixture of the two salts than when it contains either salt alone.