

Fig. 45 is a photographic reproduction of a worsted Suiting, *i. e.*, the other fabric structure previously alluded to; being given to illustrate a fancy arrangement of warp and filling.

Fig. 43<sup>b</sup> shows the analysis of the weave (or pick-out as we technically call it) also the color arrangement of warp and filling, both being the same *vis*:

2 ends (B)	2/60's worsted	Black
2 " (W)	"	White
2 " (B)	"	Black
2 " (B/W)	"	Black and White twist.

8 ends in repeat of pattern for the warp and filling.

Fig. 43<sup>c</sup> shows the color effect, laid out in the previously quoted diagram, executed on point paper thus:

Black worsted in warp and filling is indicated by *full* type, white worsted by *empty* type and black and white twist worsted by *shaded* type.

From color scheme Fig. 43<sup>c</sup> it will be readily understood that the proper placing of the different colors in warp and filling is a most important item in planning the design for a fabric and that any mistake (even if only one thread out the way) would spoil the effect aimed at and in turn make the fabric second, hence the importance of indicating the proper warp-threads and picks in connection with the weave on the point paper.

On account of the importance of these color effects, *i. e.*, the influence of color and weave combined upon the fabric, the collection of diagrams, Fig. 46 is given, showing a collection of some of our standard color effects. In these diagrams the square in the upper left hand corner shows the weave used. The upper rectangle shows the arrangement of warp, and the left lower rectangle that of the filling. The large square (or in some instances rectangle) shows the color effect produced.

Diagram 1 shows weave placed in effect section with small dots.

*Rule for ascertaining color effect:* Warp shows where there are Risers, filling where there are Sinkers.

Diagrams 2 to 13 show plain weave with 2 colors; Diagrams 14 to 19 show plain weave with three colors. Diagrams 20 to 24 show four-harness even-sided twill with two colors, and Diagram 25 the same weave with three colors. Diagrams 26 to 30 show four-harness basket with 2 colors and Diagram 31 the same weave with 3 colors. Diagram 32 shows four-harness broken twill with 2 colors, and Diagram 33 the same weave with 3 colors. Diagram 34 shows twill stripe (warp 3 light, 3 dark, 1 light, 1 medium, 1 light, 3 dark, 3 light, 3 medium, 1 light, 1 dark, 1 light, 3 medium). Diagrams 35 to 37 show warp and filling 1 end light to alternate with 1 end dark, plain weave, reversed according to motives given respectively on top of Diagrams 35 and in Diagrams 36<sup>a</sup> and 37<sup>a</sup>. Diagram 38<sup>a</sup> shows fancy weave and Diagram 38 the effect produced by arranging this weave with warp and filling 1 end light to alternate with 1 end dark.

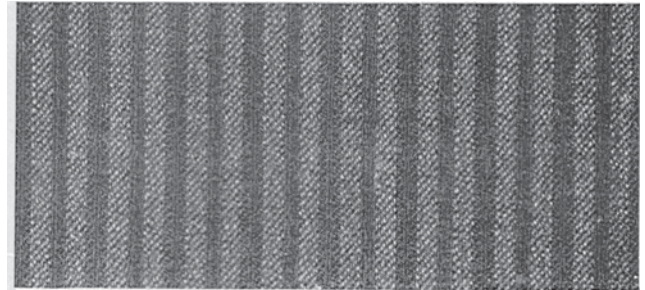
(To be continued.)

### Fancy Worsted Trousering.

(Stripe Effect.)

WARP: 7560 ends.

WEAVE: Repeat 56 warp-threads and 6 picks; to be drawn on 13-harness fancy draw as shown below the weave, *full* type referring to the harnesses carrying the face warp-threads, *cross* type to that for the back warp-threads, and *dot* type to the harness for carrying the seven threads of stuffer warp, for forming the filling effect rib.



ACTUAL REPRODUCTION OF FABRIC  
from which details of fabric structure are taken.

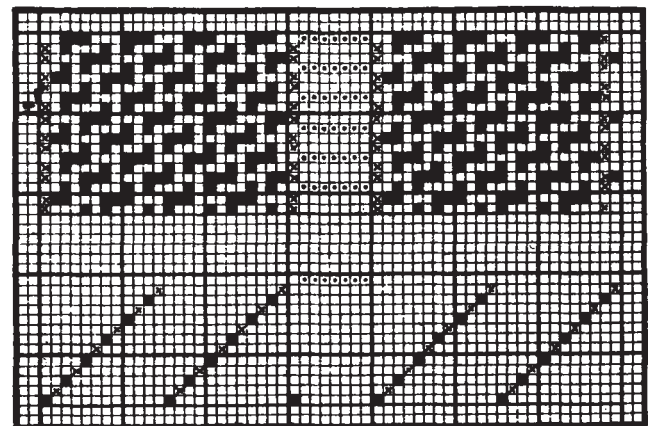
REED: 14½ with 8 ends per dent; 66½ inches wide in reed.

DRESS: 15 Sections, each containing 9 patterns = (9 × 56) 504 threads.

#### ARRANGEMENT OF WARP:

- 1 end 2/56's worsted, black, extra hard twist.
- 6 ends 2/56's worsted, black.
- 16 " 2/56's worsted, med. and dk. gray tw.
- 1 end 2/56's worsted, black.
- 1 " 2/56's worsted, black, extra hard twist.
- 7 ends 2/42's worsted; black, soft twist.
- 1 end 2/56's worsted, black, extra hard twist.
- 16 ends 2/56's worsted, med. and dk. gray tw.
- 5 " 2/56's worsted, black.
- 1 end 2/56's worsted, black, extra hard twist.
- 1 " 2/56's worsted, black.

56 ends in repeat of pattern.



WEAVE AND DRAWING-IN DRAFT.

*Extra hard twisted* threads are shown in weave by *cross* type.

*Stuffer* or soft twisted threads are shown in weave by *dot* type.

FILLING: 65 picks per inch, all 2/56's worst., black.  
FINISH: Worsted finish, clear face; 56" wide.