

## DESIGNING AND FABRIC STRUCTURE.

### NOVELTY IN WORSTED TROUSERING.

(Reversible Effect.)

**Fig. 1:** Reproduction of fabric, actual size.

**Fig. 2:** Weave; Repeat 33 warp-threads and 44 picks.

**Fig. 3:** Drawing-in Draft; 10-harness fancy draw.

**Fig. 4:** Analysis of Weave Fig. 2, showing arrangement of colors used in dressing the warp, viz:

Full type: Face—Black.

Shaded type: Face warp—Gray mix.

Cross type: Single cloth warp—Silver gray.

Dot type: Back warp—Black and Gray mix.

**Fig. 5:** Color scheme of face of fabric (2 repeats), corresponding in type used to that in analysis Fig. 4, omitting all back warp-threads. Both systems of filling (face and back filling) are taken into consideration.

Warp: 5940 ends.

Dress: 12 sections, each to contain 15 patterns @ 33 ends, or 495 ends in section arranged thus:

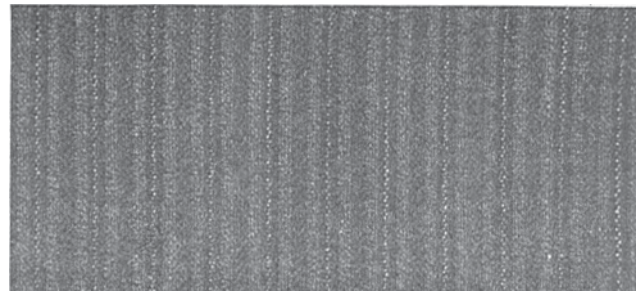
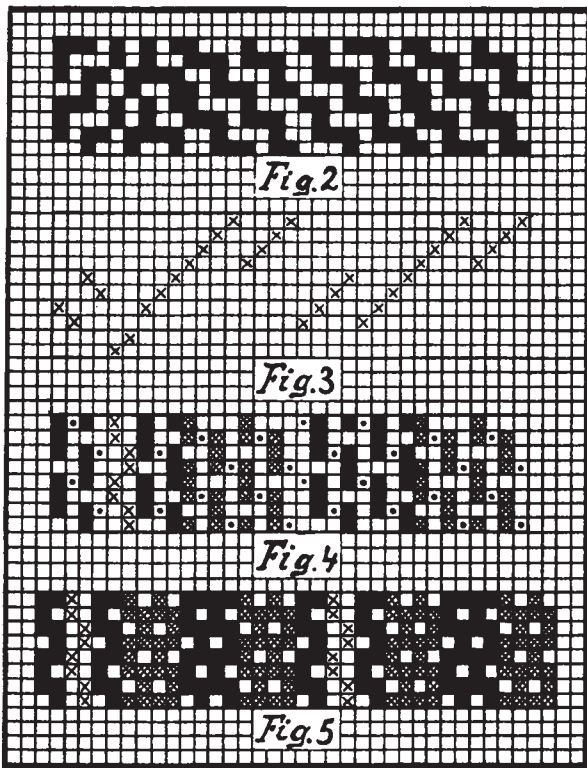


Fig. 1



1 end 2/48's worsted, black }  
 1 " 2/52's worsted, gray mix } × 2  
 2 ends 2/52's worsted, silver gray  
 1 end 2/48's worsted, black  
 1 " 2/52's worsted, gray mix  
 1 " 2/48's worsted, black  
 1 " 2/52's worsted, gray mix }  
 1 " 2/48's worsted, black } × 12

33 ends in repeat of pattern.

Color Arrangement for Face warp only (see Fig. 5)

2 ends black  
 2 " silver gray  
 2 " black  
 4 " gray mix  
 4 " black  
 4 " gray mix

18 ends repeat, and which with the 15 ends of back warp (not shown in Fig. 5) equals the total of 33 ends in repeat of the pattern.

Reed: 15 with 6 ends per dent, or 90 ends per inch; 66 inches wide in reed, exclusive of selva. Enter 2 ends silver gray (single cloth) always in the same dent.

Filling: 86 picks per inch, arranged thus:  
 1 pick 2/42's worsted, black  
 1 " 2/52's worsted, gray mix

2 picks in repeat of pattern.

Finish: Worsted finish, clear face to show pattern distinct; 56 inches wide.

Fig. 5 has been prepared to illustrate the chance for designing new effects in this line of reversible trouserings, by using different sizes and combinations of stripes.

Two systems of filling are used for these reversibles, *i. e.*, black and gray in our example, each filling covering its own color of warp, on face as well as back of fabric. c.