

B and *B'* are two upright iron standards fixed to the table top; *C* rests freely in the grooved tops of the standards *B* and *B'*. An end elevation of these details is shown in Fig. 8. The mails *D* with the upper

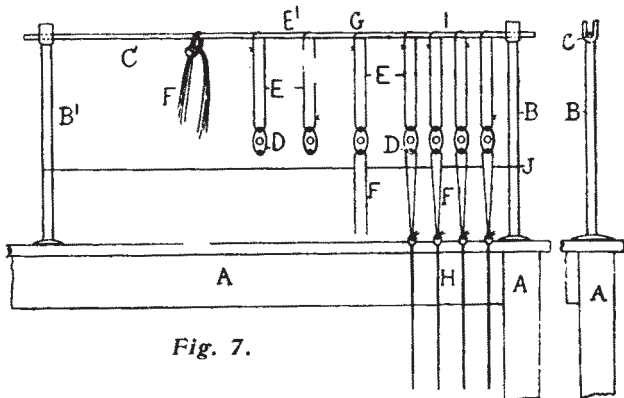


Fig. 7.

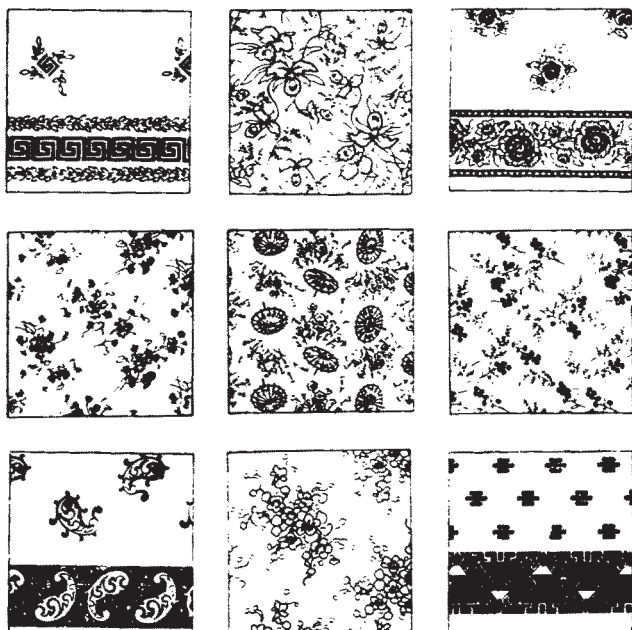
Fig. 8.

couplings *E* are next slipped from the operative's arm on to the rod *C*, two such couplings being shown in the position *E'*. The next operation is to thread the lower coupling *F* through the mail *D* as shown in the position *G*. The coupling cord *F* is then doubled and fastened by a reef or sailor's knot to the lingo *H* as shown in the position *I*. As the couplings are completed they are placed alternately in front and behind the cord *J*, so as to form a half lease and avoid any entanglement.

Tugging Operation.

The next process in order of sequence is *tugging* which consists of first reeling the cords to the required approximate length as for couplings, and then fastening them by reef knots to the bottom of the Jacquard hook, after the manner shown at *A*, Fig. 4.

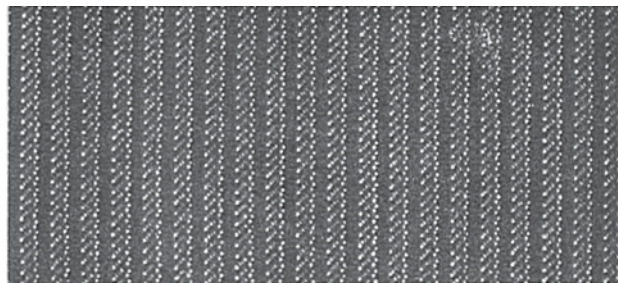
New Designs for Textile Fabrics.



The above designs have just been patented for the term of 3½ years, by the Pacific Mills.

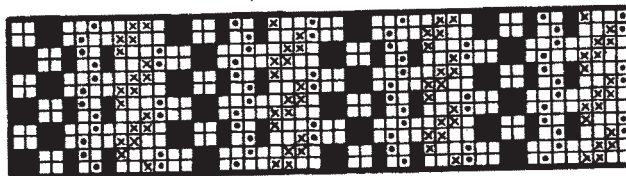
**NOVELTY IN MEN'S WEAR FROM ABROAD.
Worsted Trousering.**

Warp: 4320 ends.



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

Dress: 9 sections, each containing 40 patterns @ 12 ends, or 480 ends total.



WEAVE: Repeat 24 x 4.

Weave: 4-harness twill and basket combination. Repeat 24 x 4

- Full type* = Black warp.
- Dot type* = White warp.
- Cross type* = Pearlgray warp.

Arrangement of Warp:

- 5 ends 2/46's worsted, black.
- 2 ends 2/50's worsted, white-bleached.
- 1 end 2/46's worsted, black.
- 3 ends 2/50's worsted, pearlgray.
- 1 end 2/50's worsted, white-bleached.

12 ends in repeat of pattern.

Selrage: 16 ends of 2/28's worsted each side, using 4 dents for same, equal ¼ inch each side.

Reed: 16½ with 4 ends per dent = 66½" width of fabric, plus ½" for selvages = 67" width in reed.

Filling: 72 picks per inch, all 2/46's worsted, black.

Finish: Worsted finish, scour well, clear face on shear, 56 inches finished width.

FINISH FOR COTTON AND WOOL FABRICS.

The following recipe gives an excellent gelatine dressing. 10 lb. sugar is dissolved by gentle heat in three gallons of water. The solution is mixed with 2½ lb. of slaked lime, and kept for three days at 160 to 170 deg. F., with frequent shaking. The solution is then allowed to cool, and is decanted from the sediment. The clear liquid is used to make glue with in the usual way, in a water-jacketed pan. The glue requires about three hours to swell, and about ten hours heating on the water bath. When the glue is made it is neutralized with oxalic acid, and a little carbolic acid is added as a preservative. If it is too thick for use, it is diluted with acetic acid.