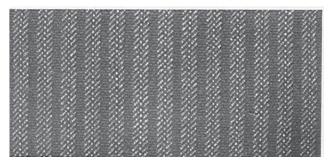
Posselt's Textile Journal

Vol. XII. June, 1913. No. 6

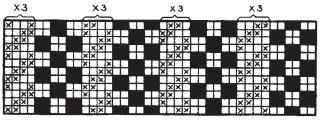
NOVELTY IN MEN'S WEAR FROM ABROAD. Worsted Trousering.

Warp: 4212 ends.



Actual Reproduction of Fabric from which details of fabric structure given, are taken.

Dress: 9 sections, each containing 26 patterns @ 18 ends, or 468 ends total.



■-Black Warp 🗵 =Lt.and Med. Gray twist, also Gray and Black Warp

WEAVE: Repeat 72 warp threads and 4 picks.

Weave: 2-2 4-harness twill (for 12 threads) and 4-harness basket weave (for 6 threads) combination, with a clear cut between both weaves wherever they join. Repeat of complete weave 72 warp-threads and 4 picks; draw on 12-harness, fancy draw. The last six black ends in the warp pattern interlace with the basket weave portion of the combination weave.

Arrangement of Warp:

4 ends 2/48's worsted, lt. and med. gray tw.

1 end 2/42's worsted, black.

1 end 2/48's worsted, light gray.

1 end 2/42's worsted, black.

4 ends 2/48's worsted, lt. and med. grav tw.

7 ends 2/42's worsted, black.

18 ends, repeat of pattern.

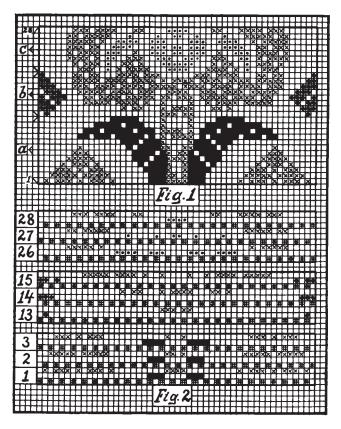
Reed: 16 with 4 ends per dent = 66" width of fabric, exclusive selvage, in reed.

Filling: 68 picks per inch, all 2/42's worsted, black.

Finish: Worsted finish; scour well, clear face, 56" finished width.

HOW MADRAS CURTAINS ARE MADE.

The same refer in their method of construction to a most peculiar fabric structure. While the ground or body portion of the fabric is interlaced with the plain weave, its figures are interlaced with the greatest variety of weaves. The cheaper class are woven in the piece and sold by the yard, whereas the better class (as retail from \$3.50 to \$12 a pair) are woven as separate curtains, with borders on the sides and the bottom.



As a rule the warp is a 2 ply cotton yarn, of a color corresponding to, or harmonizing with that of the ground or body filling; occasionally two or more colors are used, more particularly for the sections of the warps as form the borders. A count of yarn and texture well adapted to be used for these fabric structures is 2/60's cotton with 40 warp-threads per inch, this being a combination which will give the figure picks a chance to show up well. The number of ground picks inserted vary from 35 to 40 per inch.

A casual examination of these curtains will convey the idea of a great many different colors used for the figure filling, i. e., have the fabric appear to be of a complicated construction, whereas seldom more than two or at the most three colors are used at one time. As a rule, one of the colors of the figure filling remains uniformly present throughout the entire length

of the fabric, the 2nd figure color (or 2nd and 3rd color, provided three figure picks are used in the construction of the fabric) being changed to different colors during the weaving of the repeat of the pattern. For instance, changes like this may be made after weaving a required portion of the design with the one combination, viz: olive and bordeaux, olive and brown-orange, olive and indigo blue, olive and roseate, etc.

Sometimes we meet fabrics constructed upon the general plan of 2 figure picks used but where at the changes of the one color, both colors (the old and the new) are used for a while, in turn producing a fabric containing part the time 2 and for a short time 3 figure picks in its construction.

For the ground or body picks the same count of yarn as used for the warp is employed. For the figure picks, a very loosely twisted cotton yarn, of about 7's count, is used.

The Point Paper Design.

Fig. 1 is given to illustrate the subject, by a portion of the working design executed on point paper, showing the formation of the design as produced by the

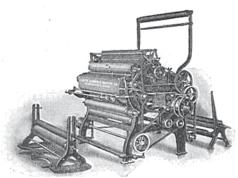


Fig. 3

figure picks floating on the face of the fabric. With reference to the floating of the figure picks it will be seen that four is the standard float, *i. e.*, the filling floats over four warp-threads on the face of the fabric. Only in special places, where necessary on account of the proper outline of a figure, one, or two ends more may be used.

Different forms for interlacing are used.

Cross type, has been selected to represent the color #1 of the figure, to run uniformly throughout the entire fabric. The weave used is the 5-leaf satin and 6 x 6 pointed twill.

Full type, or color #2 of the figure, as used in portion a of the design, shows twill and satin interlacing. Circle type, or color #3 of the figure, as used in portion b of the design, shows twill interlacing.

Dot type, or color #4 of the figure, as used in portion c of the design, shows part of the time twill interlacing, part the time no weave being necessary on account of size and shape of figure.

The Analysis.

Fig. 2 shows three portions of actual interlacing of the fabric as is taking place in the loom, being sufficient to give a clear understanding of the formation of the complete curtain.

One ground pick to alternate with 2 figure picks, is the arrangement observed throughout the entire curtain.

Of the four different colors of the figure picks, never more than two, besides the ground pick are used.

Comparing Fig. 2 to Fig. 1 shows the design of the latter actually reproduced in Fig. 2, using corresponding types for the various effects, in order to simplify subject.

The cutting of the Jacquard cards is done on a Royle Piano Machine, direct from design Fig. 1; the Jacquard harness produces the figure effect, the ground pick, i. e. the plain weave, being obtained by means of special harness rods operated by cams. In an 8-row deep comberboard of the Jacquard loom, the heddles are threaded onto 8-harness rods, using the rows in width in the comberboard in rotation; harness 1, 3, 5 and 7 are raised on every uneven number of ground pick, harness 2, 4, 6 and 8 are raised on every even number of ground pick. The raising of the harness rods in turn raises its respective heddles as strung over and resting on it. The heddle thus can be operated two ways: a by the Jacquard machine for producing the figure, and b by the harness rods for interlacing plain weave for the ground picks.

Of the three sections in analysis Fig. 2,

numerals 1, 2 and 3 represent the first nine picks of the complete analysis, *i. e.*, the interlacing for the first three horizontal rows of squares in part **a** of design Fig. 1.

Three picks in Fig. 2 refer to one pick in Fig. 1, viz:

Ground pick shaded type Figure pick #1, full type Figure pick #2, cross type

Numerals 13, 14 and 15 in turn refer to the first three picks in part **b** of design Fig. 1.

Figure pick #1 is in this case changed to color represented by *circle* type.

Numerals 26, 27 and 28 illustrate the plan of interlacing for the last three horizontal rows of squares in part c of design Fig. 1.

Figure pick #1 is in this case changed to color

represented by *dot* type.

Explanations thus given in connection with two color designs will at the same time explain three color designs, one additional figure pick being then added in the analysis to the two used in our example.

With reference to design Fig. 1 and analysis Fig. 2, *empty* type equals risers, or warp up, to produce fabric *face up* on the loom, explained by the fact that the figure as shown in Fig. 1 is produced by the floating of the filling on the face of the fabric.

The floats of the filling as forming itself on the back of the fabric structure are next cut away by specially constructed shearing machinery, as shown in Fig. 3, and which is built by the Curtis & Marble Machine Co., Worcester, Mass. Small floats, which can not be reached by the machine are left remaining in the fabric, the same being of insufficient prominence to trouble with.