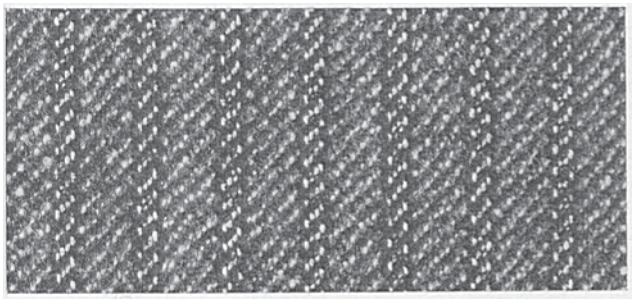
Woolen Cheviot Trousering.

(*Silk Stripe Effect.*)

WARP: 1920 ends.

WEAVE: 4-harness even-sided twill; 8-harness straight draw.

REED: 14½ with 2 threads per dent; 66⅔ inches wide in reed, exclusive selvage.



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

DRESS: 6 Sections, each containing 20 patterns = (20 × 16) 320 threads.

ARRANGEMENT OF WARP:

1 end 15/2 spun silk, white.
2 ends fancy twist, composed of 2/56's worsted black and 15/2 spun silk, white.
1 end 15/2 spun silk, white.
1 end 2½ run woolen cheviot, black.
10 ends 5 run woolen cheviot gray and 5 run white tw.
1 end 2½ run woolen cheviot, black.

16 ends in repeat of pattern.

FILLING: 32 picks per inch, all 2¼ run woolen cheviot, black.

FINISH: Cheviot finish, scour well, clip on shear, decatize; finished width 56 inches.

PRODUCING MULTI-COLOR EFFECTS ON WOOLENS.

In the ordinary way two and multi-color effects on woolen fabrics are produced by dyeing the material in the desired shades, previously to weaving, either in the loose or the yarn state, or by printing the fabric or the slubbing. These are the most serviceable methods where staple goods come under consideration, but it is different when it is a matter of turning out quickly goods in relatively small quantities and this in special colorings. Then the time necessary in accomplishing the successive operations of dyeing the loose wool, mixing to give the proper shade, carding, spinning, weaving, and finishing, is a drawback. The cost of adapting machines for this treating of small lots and the high percentage of waste in the spinning and weaving operations is a further disadvantage to the manufacturer.

As a consequence says Textile Mercury, attempts have frequently been made to adopt some such measure of so treating a portion of the wool at a stage prior to the weaving as to affect its property of absorbing coloring matters, working it up with ordinary wool, and subsequently dyeing in the piece. This at once offers the advantage of lessening the waste and remnants of yarn, besides shortening the time required for the production of an order.

A method of this character which has been employed at times consists in preparing a part of the wool with metallic salts, generally chrome and alum mordants applied in the ordinary way, mixing in the proper proportion with non-mordanted wool, spinning, and weaving, or weaving the fabric from prepared and non-prepared yarns. Upon dyeing the resulting fabric with the mordant dyes, only the prepared portions of wool become colored, the other remaining practically unaltered.

But by adding to the dyeing liquor acid dyes also, both the mordanted and the non-mordanted wool may be dyed, the latter by the acid dyestuff only and the other by both. In this manner effects may be produced in white and color or in two colors. The process, however, has not secured any great favor, mainly perhaps because in the case of white and color effects the white is seldom pure or clear enough for most purposes, since all the mordant dyestuffs color non-mordanted wool under these conditions to some extent. Another disadvantage is the difficulty of dyeing through.

Another method, somewhat limited in scope, rests in utilizing the property of chlorinated wool absorbing almost all coloring matters much more strongly than ordinary wool. By working together in the fabric wool prepared with chlorine and ordinary wool, and subsequently dyeing, dark and light shades of the same color are produced, particularly when the direct cotton dyes are employed. This process is of further interest because pronounced crêpon effects are produced by fulling, through the property of chlorinated wool to resist felting and shrinking.

This property brings chlorine into use for the treatment of yarns before dyeing for hosiery and knitted goods, because of the soft feel and silky scroop it imparts, as well as immunity against felting.

For the production of two-color effects in the piece, the chlorinating process is employed but very little, on account of the difficulty of matching shades accurately, and because the degree of influence of the chlorine on the fibre in affecting its affinity for dyestuffs varies.

An advance in the class of work under consideration was realized when the observation was made some years ago that wool, treated with tannin and metallic salts, particularly tin and antimony salts, loses its affinity for the majority of wool dyestuffs and acquires at the same time an increased affinity for the basic dyestuffs.

The material to be treated is worked for an hour at the boil in a solution of tannin (20 per cent) and hydrochloric acid (6 per cent), washed, and boiled for about an hour in a fresh liquor of tartar emetic (12½ per cent) and acetate of soda (10 per cent) then washed and dried. This method is serviceable for the treatment of loose wool, slubbing, and yarns.

Yarns or fabrics worked up from prepared and non-prepared wool may be easily obtained in white and color, the non-prepared being dyed by means of the acid dyes in the usual way. The prepared wool remains unsoiled. For the production of two-color effects the prepared portion is dyed in a liquor containing at least 10 per cent of acetic acid and the required quantity of basic dyestuff solution. Then the non-prepared portion is dyed in a fresh liquor with acid dyes.