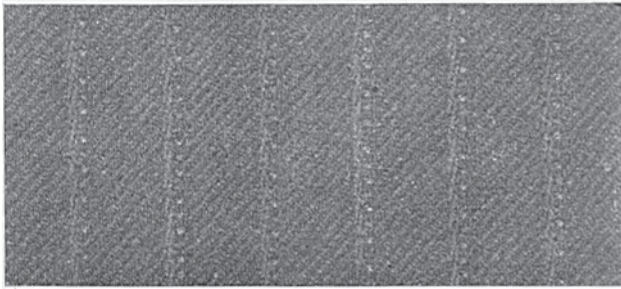### NOVELTY IN MEN'S WEAR FROM ABROAD.

Worsted Suiting. (*Stripe*.)

Warp: 6944 ends.

Dress: 16 sections, each containing 7 patterns @ 62 ends, or 434 ends total.

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

Weave: 4-harness even sided twill for face, backed 1:1 with 4-harness uneven sided twill, used for ground portion of fabric, and which in turn is striped over with a basket effect and a diagonal twill. Repeat 62 warp-threads and 16 picks.

Drawing-in draft: 18-harness fancy draw, as shown by *cross* type below weave.
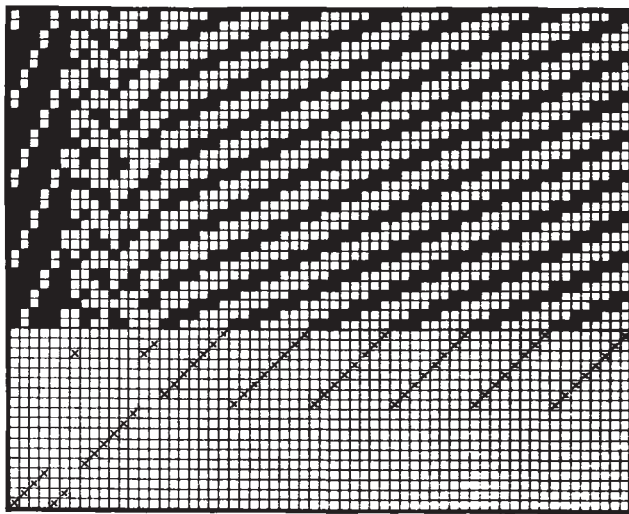
Arrangement of Warp:

7 ends 2/48's worsted, olivebrown.
1 end 2/56's worsted, med. green.)
1 " 2/56's worsted, bordeaux. } × 2.
1 " 2/50's merc. cotton, olive.)
49 ends 2/48's worsted, olivebrown.
—
62 ends in repeat of pattern.

Reed: 13½ drawn thus:
7 dents with 8 ends.
1 " " 6 "
—
8 dents containing 62 ends, or one repeat of the pattern, to be 66¼ inches wide in reed.

Filling: 46 picks per inch, all 2/42's worsted olive-brown.

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

CREPE WEAVES.
(*Continued from page 6.*)

Satin Foundations—Counting-off in Sets of Two or More Warp-threads.

This system of constructing crêpe weaves having satin foundations differs from the one previously explained in that two different interlacings of the warp-threads in the repeat of the weave are made use of. A given interlacing is added to each foundation satin spot, counting this interlacing for some of the warp-threads upwards and for the others downwards on the weave plan. To explain this method of constructing crêpe weaves the accompanying plate of weaves is given, and where *cross* type in every instance indicates the respective foundation satin weave.

Fig. 1: Foundation the 7-harness satin. The interlacing selected for every warp-thread, for its six picks between two satin spots, is $\frac{3}{1}$ $_2$, counting for every uneven warp-thread (considering two repeats of the satin, *i. e.*, 14 warp-threads: 1, 3, 5, 7, 9, 11 and 13) beginning with the next pick to the satin spot *upwards,* and for every even warp-thread (2, 4, 6, 8, 10, 12 and 14) starting from the pick before the satin spot and counting *downwards* on the weave plan, resulting in a crêpe weave, repeating on 14 warp-threads and 7 picks. Two repeats in height of weave are given the repeat on top being shown all in *full* type.
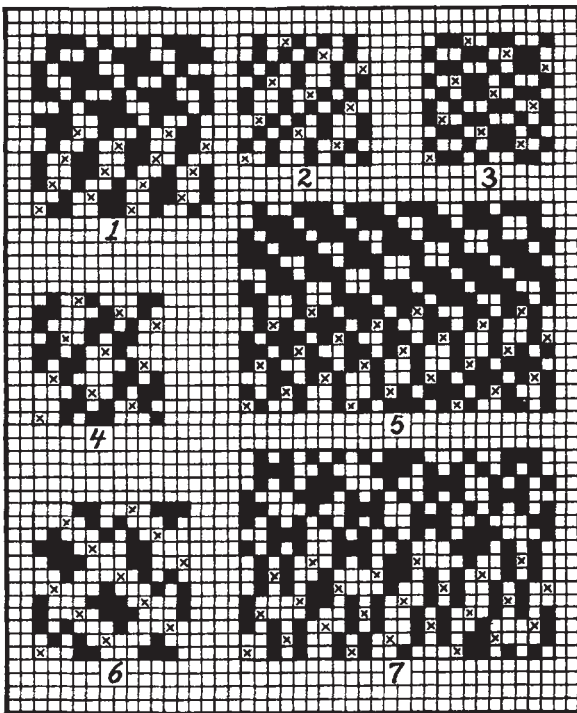
Fig. 2 has for its foundation the 10-harness satin, used with counting-off $\frac{1}{2}\frac{2}{1}\frac{1}{2}$ alternately, every uneven warp-thread upwards and every even warp-thread in the repeat of the weave downwards, for the nine picks between the two spots of the repeat of the 10-harness satin. Repeat of weave 10 warp-threads and 10 picks. One repeat of weave is given.

Fig. 3, same foundation weave and arrangement as used with weave Fig. 2, using $\frac{1}{1}\frac{2}{1}\frac{1}{1}\frac{1}{1}$ for counting-off the interlacing of the warp-threads with its picks.

Fig. 4, same foundation weave and arrangement as used with weave Fig. 2, using $\frac{2}{3}\frac{2}{1}\frac{1}{1}$ for counting-off the interlacing of the warp-threads with its picks.

Fig. 5 has for its foundation the 8-harness satin, used with counting-off $\frac{1}{1}\frac{3}{2}$ for the seven picks between every two satin spots. In this instance the counting is done alternately for two warp-threads counting upwards and for one warp-thread downwards, taking in either instance the respective pick nearest to the satin spot as the basis to start counting from. This gives us 3 warp-threads to the set and which number in connection with 8, the basis of the foundation, gives us (3 × 8 =) 24 as the lowest possible multiple of said two numbers (3 and 8) hence repeat of weave 24 warp-threads and 8 picks. Two repeats in its height are given.

Fig. 6 has for its foundation the 12-harness satin. The counting-off is $_1{}^3{}_3{}^1{}_3$ for the eleven picks between two satin spots. Two warp-threads are counted, beginning with the pick above the satin spot, upwards to alternate with two warp-threads, beginning with the pick before the satin spot and counting down-

wards, i. e., 4 warp-threads form one set, and which number (4) is evenly divisible into 12, the satin foundation, hence the repeat of the crêpe weave 12 warp-threads and 12 picks. One repeat of the weave is given.

Fig. 7 has for its foundation the 8-harness satin. The counting-off is done with $_1{}^3{}_3{}^1$ for the seven picks between two satin spots. Alternately three warp-threads are counted upwards and three warp-threads downwards, i. e., 6 ends in one set, which number in connection with 8, the basis of the foundation weave, gives us 24 as the lowest possible multiple of these two numbers, hence repeat of weave 24 warp-threads and 8 picks. Two repeats in height of weave are given.

DRAWING-IN DRAFTS, REED AND HEDDLE CALCULATIONS.

The same are most important items, and besides proper equipment form the backbone of quality and production in the weave room. Many a time a poor drawing-in draft has been the cause of trouble to the weaver, in some instances requiring the cutting of the warp out of its harness, and re-drawing it. The trouble may have been that the warp was set too close in the harness and started chafing, again certain harnesses in a fancy draw may have been placed in the wrong position in the set. In other cases, in order to possibly save one or two harnesses, a fancy drawing-in draft may have been made too complicated for the weaver to keep track of, where as one

or two additional harnesses would have considerably simplified matters.

With reference to poor reeding—this may have passed the weave room, but many a finisher will remember those stripes or streaks in the coloring of a fancy fabric that made the piece a second. Two warp-threads in a weave of two different colors but interlacing the same with the filling throughout the repeat of the weave, if not separated by the dent wire, no doubt will have accomplished it. Again, few fixers will forget warps they had to cut out that chafe and would not weave in the one reed but run fair when re-drawn in another number.

In some fancy drawing-in drafts, a few stray plain or colored ends used in a large repeat of pattern, but interlacing different than the rest of the warp-threads, may show skips on the face of the cloth— a few ends may have been put on the back harness or harnesses, the front being crowded with regular weaving warp-threads, and when said rear harness or harnesses may not have been able to raise its warp-threads sufficient to either raise or lower them to the proper level of the shed on account of fibres of adjoining threads holding them just above or below the nose of the shuttle. Placing such a harness or harnesses next to the reed will solve the trouble, except the difference of interlacing is too radical and when two-beam work only will do.

With reference as how to produce the proper drawing-in draft for a fancy weave, ascertain the lowest number of harnesses that will weave the pattern, after which experience will guide you as to whether it is advisable to use the lowest number of harnesses possible, or use more harnesses, provided they are at your disposal.

How to Make Out the Drawing-in Draft for a Fancy Weave for the Least Number of Harnesses Possible.

RULE: Acertain the repeat of the weave, after which examine (on the point paper) each warp thread separately (one after the other) as to its rotation of interlacing in the filling.

Every warp thread interlacing the same (in the same picks throughout the entire repeat of the weave) as one before, can be drawn on that particular harness, whereas every warp thread interlacing different, requires a new harness. This rule will hold good for any weave, single or double cloth.

To give a clear understanding of the subject, Fig. 1 is given. In the same

Diagram A represents a fancy weave repeating on 95 warp threads and 6 picks.

Diagram B illustrates its drawing-in draft necessary to produce this weave on 14 harness (being the lowest number of harness possible to reduce this weave.)

In this drawing-in draft, the harnesses are represented by means of horizontal lines below the weave, each line representing one harness; there being consequently fourteen of these lines given to illustrate the fourteen harnesses used in the loom. The different warp threads of the weave, in connection with this