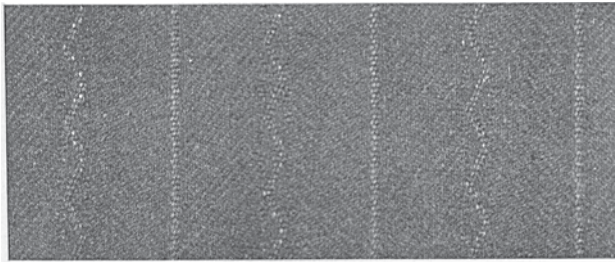


NOVELTY IN MEN'S WEAR FROM ABROAD.

Worsted Suiting. (Stripe.)

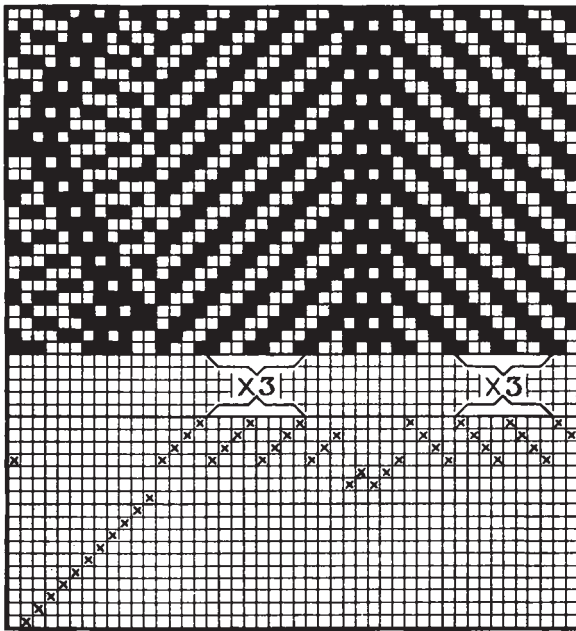
Warp: 4056 ends.

Dress: 13 sections, each containing 4 patterns @ 78 ends, or 312 ends total.



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

Weave: 4-harness broken twill ground, striped over alternately with a wavy and a straight running warp effect rib weave. Repeat 78 warp-threads and 28 picks.



WEAVE AND DRAWING-IN DRAFT.

Arrangement of Warp:

- 1 end 2/48's worsted, olive.
 - 1 " 24's black and 180's lt. brown, merc. cotton.
 - 1 " 2/48's worsted, olive.
 - 1 " 24's black and 180's lt. blue, merc. cotton.
 - 1 " 2/48's worsted, olive.
 - 1 " 24's black and 180's lt. brown, merc. cotton.
 - 1 " 24's black and 180's lt. blue, merc. cotton.
 - 1 " 2/48's worsted, olive.
 - 1 " 24's black and 180's lt. brown, merc. cotton.
 - 1 " 2/48's worsted, olive.
 - 1 " 24's black and 180's lt. blue, merc. cotton.
 - 32 ends 2/48's worsted, olive.
 - 2 " 2/56's worsted, bordeaux.
 - 2 " 2/56's worsted, blue.
 - 31 " 2/48's worsted, olive.
- 78 ends in repeat of pattern.

Drawing-in draft: 17-harness fancy draw as shown by cross type below weave.

Reed: 15 drawn thus:

2 dents containing 5 ends each
17 " " 4 " "

19 dents containing 78 ends, or one repeat of the pattern; to be 66 inches wide in reed.

Filling: 62 picks per inch, all 2/48's worsted, olive.

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

WARP SHEDDING.

By F. Bradbury.

The object of warp shedding is to divide the warp-threads into two portions, producing an upper and lower line of threads; this division is technically known as the *shed*. The filling, which is contained in a shuttle, has to be propelled through this shed from side to side of the loom, so as to interlace and lay the filling threads transversely to those of the warp. The shed must be of sufficient depth to allow the shuttle to travel through it with the least possible amount of friction.

For the purpose of shedding, *heddles* are employed, which are free to move in a vertical plane. An important feature in the heddle is a small eyelet, technically called the *mail*, through which the warp-thread is drawn. The number of threads in the warp correspond with the number of these eyelets in the harness.

The warp-threads normally lie longitudinally and in a horizontal plane, but when the heddles are operated by suitable mechanism, they are either elevated, depressed, or remain stationary, according to the requirements of the pattern and type or principle of the shedding mechanism of the loom.

Any movement which is imparted to the warp-threads should be eccentric, since any sudden or undue strain upon them would result in breakages. The most satisfactory movement which can be imparted to the shedding mechanism, is a slow motion at the commencement, with a gradual increase in velocity until the centre of the traverse is reached, then a decrease in the same velocity ratio. Further, it is necessary that the shed should remain open for as long a period as is possible during the passage of the shuttle through it.

There are several fundamental principles of warp shedding, involving the introduction of numerous mechanical contrivances.

Principles of Warp Shedding.

There are two chief principles of warp shedding, *viz.*: *Closed* and *Open*; the former may be sub-divided into *centre* and *bottom* and the latter into *open* and *semi-open*.

CLOSED SHEDDING is so called because all the warp-threads are placed in the same plane at the completion of each pick, irrespective of the position which they must occupy on the succeeding picks.

OPEN SHEDDING is so termed because the warp-threads remain in their highest or lowest position in the shed for as many picks as the pattern indicates.