Feb. 11, 1936. E. R. MEINIG 2,030,459

MILANESE CLOTH

Filed May 13, 1933

Fig. 1.

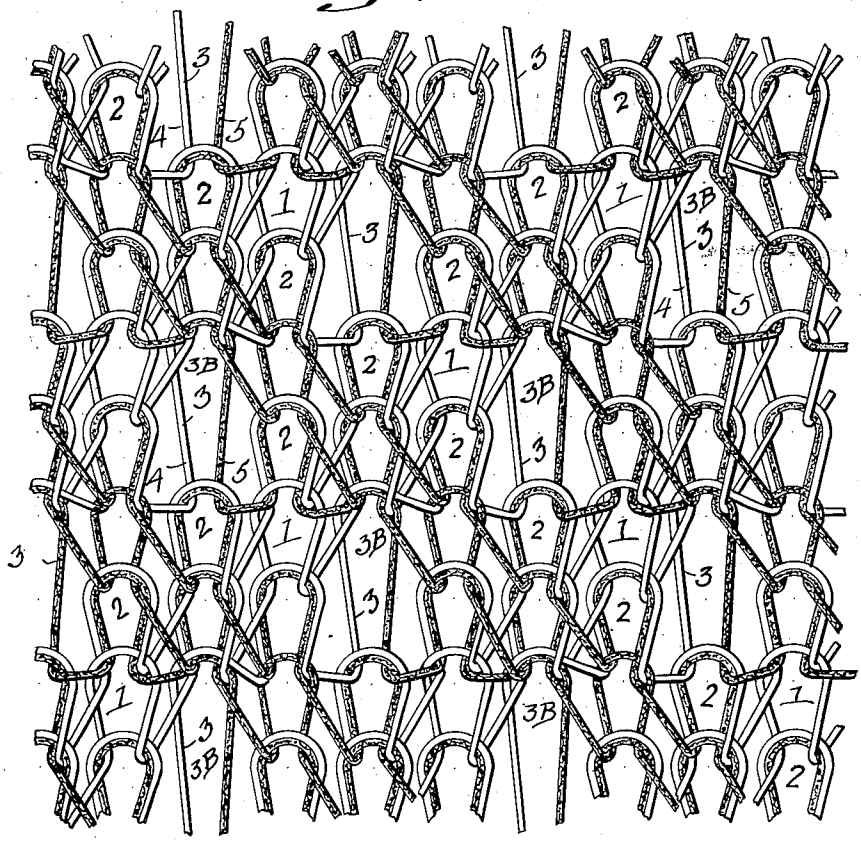


Fig. 2.

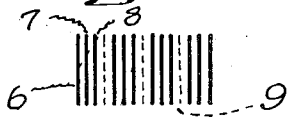


Fig. 3.



Fig. 4.



Fig. 5.

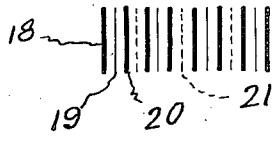


Fig. 9.



Fig. 6.

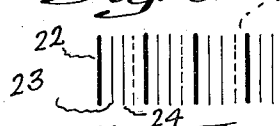


Fig. 7.



Fig. 8.



INVENTOR.

Ernst Richard Meinig

BY

Wm. R. Smith

ATTORNEY.

Patented Feb. 11, 1936 2,030,459

UNITED STATES PATENT OFFICE

2,030,459

MILANESE CLOTH

Ernst Richard Meinig, Wyomissing, Pa.

Application May 13, 1933, Serial No. 670,843

6 Claims. (Cl. 66—195)

This invention relates to a Milanese fabric and has for its primary object the knitting of the fabric in a manner that the same will have structural characteristics and surface ornamentation not characteristic of a plain knitted Milanese fabric.

An object of the invention resides in varying the knitting processes to the extent that the finished fabric will have a plurality of groups of single loops and groups of double loops in counter distinction to the usual method of forming a Milanese cloth entirely of groups of double loops.

Another object of the invention resides in providing a combination arrangement of single loops, double loops and spread loops over the entire area of the fabric systematically arranged to give a crepe appearance to the fabric.

A feature of my invention resides in forming rows of single loops and rows of double loops crossing each other at an angle so as to produce a composite effect not characteristic of Milanese fabrics heretofore produced.

Another feature of my invention resides in knitting the Milanese cloth with predetermined threads "out" so as to produce in the finished fabric rows of single loops and rows of spread loops, the latter producing openings in the fabric systematically arranged and coacting with the threads of the knitted loops to give a crepe effect to the finished fabric.

My invention is distinguished in the use of a plurality of threads of different sizes utilized to systematically knit single loops, double loops and spread loops to give an ornamental crepe effect to the surface of the fabric.

My invention is distinguished in the novel manner of arranging the threads of different sizes in relation to each other and in relation to the row of single loops and spread loops of the fabric.

With these and other objects in view the invention will be better understood from the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a diagrammatic view of the knitted fabric.

Figure 2 is a diagrammatic view of one combination of threads.

Figure 3 is a diagrammatic view of another combination of threads.

Figure 4 is a diagrammatic view of another combination of threads.

Figure 5 is a diagrammatic view of another combination of threads.

Figure 6 is a diagrammatic view of another combination of threads.

Figure 7 is a diagrammatic view of another combination of threads.

Figure 8 is a diagrammatic view of another combination of threads.

Figure 9 is a diagrammatic view of another combination of threads.

Broadly stated my invention consists in knitting a Milanese cloth in the usual way leaving out threads at predetermined points in the upper tier and lower tier so that at times certain knitting needles of the machine will only have single loops thereon instead of double loops which is the usual custom. By selectively removing threads, I have found that the finished knitted fabric is provided with diagonal rows of single loops, diagonal rows of double loops and diagonal rows of spread loops all of which combine to produce the crepe effect which is the object of the present invention.

I have also found from practice that by varying the size of the different threads and arranging the different size threads in a specific relation in the finished fabric, I enhance the ornamental crepe effect of the fabric.

In carrying out my invention, the Milanese machine is operated in the usual manner with the exception that at predetermined spaced positions certain threads have been removed with the result that when the fabric has been completed as shown in Figure 1, the same possesses diagonal rows of single loops 1 and double loops 2 due to the fact that threads are missing at spaced intervals. The finished fabric also includes diagonal rows of spread loops 3 each of which has its opposite limbs 4 and 5 produced by different threads as clearly shown in Figure 1, in which the lower tier loops are indicated as a light thread and the upper tier loops indicated as a darker thread. As will clearly appear from Figure 1, the two threads of different thicknesses respectively forming each of the opposite limbs 4 and 5 of the loops 3 overlap one another so that said threads are continuously carried from one course into another without interruption in the knitting operation.

It is, of course, to be understood many combinations of threads and groups of threads "out" may be resorted to for producing associated groups of double loops separated by groups of single loops over the entire area of the fabric but for the purpose of illustration, I have shown in the diagrammatic views in Figures 2 to 8, groups of three threads defined by a thread "out".

For instance, in Figure 2 I have illustrated three heavy threads, 6, 7 and 8 in each group,

the groups being defined and separated by a thread "out" indicated by the dotted line 9.

In Figure 3 I have illustrated three fine threads, 10, 11 and 12 in each group, the groups being defined and separated by a thread "out", indicated by the dotted line 13.

In Figure 4 I have illustrated each group as consisting of a light thread 14, a heavy thread 15 and a light thread 16, the groups being defined and separated by a thread "out" indicated by the dotted line 17.

In Figure 5 I have illustrated each group as consisting of a heavy thread 18, a light thread 19 and a heavy thread 20, the groups being defined and separated from each other by a thread "out" indicated by the dotted line 21.

In Figure 6 I have illustrated each group as consisting of a heavy thread 22, a light thread 23 and a light thread 24, the groups being defined and separated from each other by a thread "out" indicated by the dotted line 25.

In Figure 7 I have illustrated each group as consisting of a heavy thread 26, a light thread 27 and a light thread 28, the groups being defined and separated from each other by a thread "out" indicated by the dotted line 29.

In Figure 8 I have illustrated each group as consisting of a heavy thread 30, a heavy thread 31 and a light thread 32, the groups being defined and separated from each other by a thread "out" indicated by the dotted line 33.

In Figure 9 I have illustrated each group as consisting of a heavy thread 34, a medium size thread 35 and a light thread 36, the groups being defined and separated from each other by a thread "out" indicated by the dotted line 37.

I am aware of the fact that threads have been left out in the knitting of warp fabrics heretofore but I am of the opinion that I am the first to arrange in a finished Milanese fabric a combination of diagonal rows of single loops, double loops and spread loops, the latter forming openings 3B to give an ornamental crepe appearance to the fabric.

I am also of the opinion that I am the first to numerically and selectively arrange in definite positions over the entire area of the fabric, threads "out" coacting with adjacent size thread loops to produce the desired crepe effect. It is, of course, to be understood that other combinations of different size threads can be utilized than illustrated and different relations established therebetween and the individual threads may be treated or given different colors to produce other effects in the finished fabric and therefore I do not wish to be limited in protection in any manner whatsoever except as set forth in the following claims;

What I claim is:

1. A Milanese cloth consisting of relatively different sized threads forming diagonal rows of single and double knitted loops, the limbs of certain of said single loops being each composed of a separate thread, and the threads in the opposite limbs being of different thicknesses.

2. A Milanese cloth consisting of relatively different sized threads forming diagonal rows of single and double knitted loops, certain of the loops being elongated to produce diagonal rows of openings in the cloth, the limbs of said elongated loops being each composed of a single thread and the threads in the opposite limbs being of different thicknesses.

3. A Milanese cloth comprising knitted loops formed from light and heavy threads and systematically arranged throughout the cloth, certain of the loops being elongated, the limbs of said elongated loops being each composed of a single thread and the threads in the opposite limbs being of different thicknesses.

4. In a knitted fabric of the character described, looped stitches distributed throughout the area of the fabric, the opposite limbs of said stitches being each composed of a separate thread and the threads in the opposite limbs being of different thicknesses.

5. In a knitted fabric of the character described, looped stitches distributed throughout the area of the fabric, the opposite limbs of said stitches being each composed of a separate thread, the threads in the opposite limbs being of different thicknesses and arranged in overlapping relation at the loop portion of said stitches.

6. A Milanese cloth consisting of series of single and double knitted loops, the limbs of certain of said single loops being composed of the same thread having a uniform thickness, the limbs on the remaining of said single loops being each composed of a separate thread and the threads in the opposite limbs of said remaining loops being of different thicknesses.

ERNST RICHARD MEINIG.