

UNITED STATES PATENT OFFICE

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WOVEN FABRIC

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This invention relates to a method of manufacturing cloth, that is, such woven fabrics as are subjected during their finishing to a felting process by fulling.

5 In most cases various materials are used for cloth such as wool, artificial wool, cotton and also silk which are generally spun together to make yarn. It has been found that raw materials which differ as regards length
10 of staple, curling, elasticity, thickness of fibre and the like do not generally give homogeneous threads and when spun together in the usual manner in fulling do not give a good felting effect. This is also the case with
15 cloths in which different kinds of the same raw material, for example, wool, are used, as here also the physical, chemical, and other properties of the different sorts differ from one another and therefore make it difficult for
20 the mixture to become homogeneous. It has now been found that cloths take on a more attractive appearance in fulling if, as weft threads, two different threads are introduced, each of which contains raw materials which,
25 as regards their physical or chemical properties, curling, staple or the like are most nearly the same or supplement one another and, if these two threads are introduced in the same shed, either in doubled form or
30 one after the other. In this way, as has been found, the more valuable material has a better appearance than when it is combined with less valuable material and a more complete and satisfactory felting takes place on fulling. It has also been found that the degree
35 of felting can be further increased if the two threads are twisted in opposite directions. According to the kind of materials combined
40 in the different threads, the felt may also be improved if one thread is twisted more loosely and the other more tightly.

According to the invention the different weaving materials can be distributed over
45 more than two threads, for example three.

According to this method it is possible to obtain from the same materials a more valuable cloth than according to previous processes or to obtain a cloth of the same value
50 as hitherto from cheaper materials and there-

by to save up to 25% of the cost of the material.

What I claim is:—

1. A fulled fabric with warp threads consisting essentially of wool and a weft in each shed consisting of two different threads, both
55 essentially of wool, those fibres which have about the same length of staple and similar physical and chemical properties being combined in each of these threads, and the length
60 of staple and the physical and chemical properties of one of the two weft threads being different from the corresponding properties of the other weft thread, and the two weft
65 threads lying side by side in the same shed without being twisted together.

2. A fulled fabric with warp threads consisting essentially of wool and a weft in each shed consisting of two different threads, both
70 essentially of wool, those fibres which have about the same length of staple and similar physical and chemical properties being combined in each of these threads, and the length
75 of staple and the physical and chemical properties of one of the two weft threads being different from the corresponding properties of the other weft thread, and one weft thread
80 being individually twisted in one direction and the other in the other direction, and the two weft threads lying side by side in the same shed without being twisted together.

3. A fulled fabric with warp threads consisting essentially of wool and a weft in each shed consisting of two different threads, both
85 essentially of wool, those fibres which have about the same length of staple and similar physical and chemical properties being combined in each of these threads, and the length
90 of staple and the physical and chemical properties of one of the two weft threads being different from the corresponding properties of the other weft thread, one weft thread being
95 individually twisted tightly in one direction and the other weft thread loosely in the other direction, and the two weft threads lying side by side in the same shed without being
100 twisted together.

In testimony whereof I have signed my name to this specification.

NORBERT VOHS.