S. BLUMENTHAL.

PILE, PLUSH, OR NAP FABRIC.

APPLICATION FILED FEB. 4, 1908.

908,066. Patented Dec. 29, 1908.

Fig. 1.

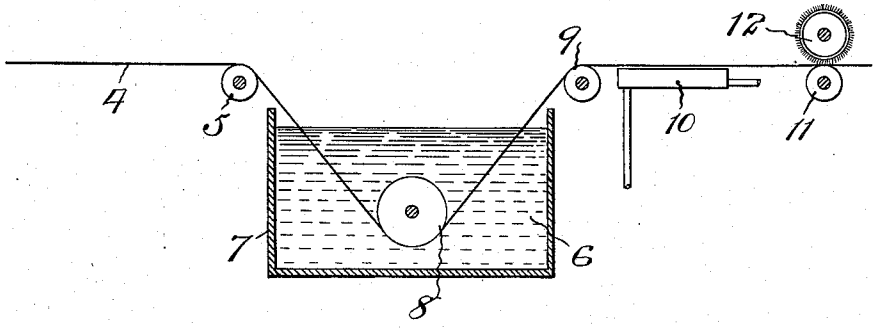


Fig. 2.

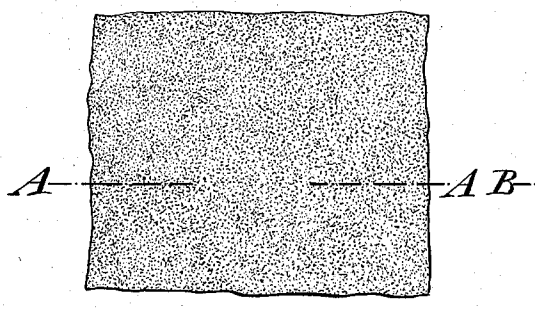


Fig. 4.

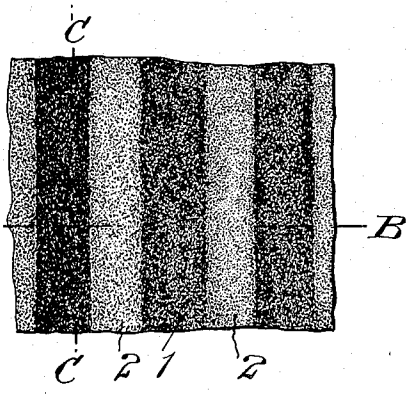


Fig. 3.

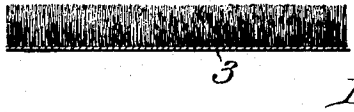


Fig. 5.

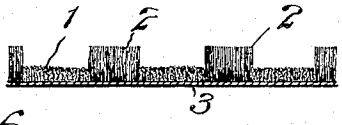
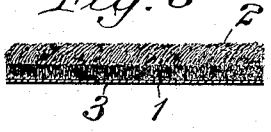


Fig. 6



Witnesses:-

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UNITED STATES PATENT OFFICE.

SIDNEY BLUMENTHAL, OF NEW YORK, N. Y.

PILE, PLUSH, OR NAP FABRIC.

No. 908,066. Specification of Letters Patent. Patented Dec. 29, 1908.

Application filed February 4, 1908. Serial No. 414,165.

To all whom it may concern:

Be it known that I, SIDNEY BLUMENTHAL, a citizen of the United States, and resident of the borough of Manhattan, in the city and State of New York, have invented a new and useful Improvement in a Pile, Plush, or Nap Fabric, of which the following is a specification.

My invention relates to a pile, plush or nap fabric having pile, plush or nap portion of the fabric formed of different kinds of fiber arranged in well defined groups so that fiber of one kind shall alternate with fiber of another kind with the object in view of producing a completed product in which the pile, nap or plush surface shall present a mottled or variegated appearance depending upon the greater prominence of one kind of fiber over another independent of any calendering or pressing operation.

My invention further consists in the method of making a fabric of the above character.

In the accompanying drawings, Figure 1 represents in side elevation, partly in vertical section and in a general or diagrammatic manner, means for passing the fabric through a bath, Fig. 2 is a face view of a piece of the fabric after it is woven and before it has been passed through the bath, Fig. 3 is a section of the same in the plane of the line A—A of Fig. 2, Fig. 4 is a face view of the same after it has been passed through the bath, Fig. 5 is a section of the same in the plane of the line B—B of Fig. 4, and Fig. 6 is a section in the plane of the line C—C of Fig. 4.

The different kinds of fibers which I have chosen for the pile, plush or nap portion of my fabric to illustrate my invention are wool and mohair, the wool being denoted by 1 and the mohair by 2. These fibers 1 and 2 are introduced into a back or foundation fabric 3 in the usual or any approved way for producing a pile, plush or nap fabric, and when introduced and cut the wool and mohair are of the same height as shown in Figs. 2 and 3. These different fibers, wool and mohair, are here shown as introduced in groups forming broad stripes running longitudinally of the goods. For instance, a group of mohair fibers is introduced forming a broad stripe of mohair and then a group of wool fibers forming a broad stripe of wool, then a group of mohair and so on. I do not, however, wish to confine myself to this grouping of the different kinds of fiber in broad stripes as it is obvious that they might be introduced in the form of narrow stripes or in forms other than stripes. These particular kinds of fibers, wool and mohair, are mentioned as illustrating two kinds of fiber which will serve to produce the effect desired since the wool, when subjected to a bath, will crinkle or collapse, while the mohair will not be affected in this way and for the purposes of my invention it is essential that the different kinds of fiber be selected with this in view, viz: that when immersed in or treated to a common bath, the one shall be affected and caused to crinkle or collapse more than the other.

The fabric having been woven as above indicated and the pile, plush or nap portion having been introduced in groups of the desired conformation, the fabric, denoted as a whole by 4, may be passed over a roller 5 and thence into liquid, for example water 6 contained in a tank 7, the said fabric passing underneath a roller 8 located in the liquid 6, thence up and over a roller 9 and along over a drying device 10 and thence over a roller 11 in engagement with a carding wheel 12. The effect of the bath 6 is to destroy the stiffness of the wool fibers, causing them to crinkle or collapse and withdraw from the former position, even with the mohair fibers, substantially as shown in Figs. 5 and 6, and in this position they will remain while the mohair fibers 2 will be affected little or not at all by the action of the bath and will remain standing at full length, the face of the fabric presenting, when dried and carded, a series of stripes composed alternately of wool and mohair, the mohair standing out prominently twice the length, more or less, of the wool and this without any pressing whatever of the wool portions but simply due to their natural crinkling or collapsing from wetting.

What I claim is:—

1. A pile, plush or nap fabric in which the pile, plush or nap portion is separated into well defined groups of different kinds of fiber, one kind of fiber having been collapsed to a greater extent than another kind of fiber.

2. A pile, plush or nap fabric in which the pile, plush or nap portion is formed in well defined groups of wool and mohair, the wool portion having been crinkled or collapsed back from the face of the mohair.

3. The method of forming a pile, plush or

nap fabric having a mottled or variegated face consisting in introducing different kinds of pile, plush or nap fiber differently affected by liquid in well defined groups and subsequently passing the fabric through a bath.

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two witnesses, this twenty ninth day of January 1908.

SIDNEY BLUMENTHAL.

Witnesses:
F. GEORGE BARRY,
HENRY THIEME.