June 13, 1933. L. KNECHT 1,913,397

TEXTILE MATERIAL

Filed Oct. 31, 1931

Fig. 1.

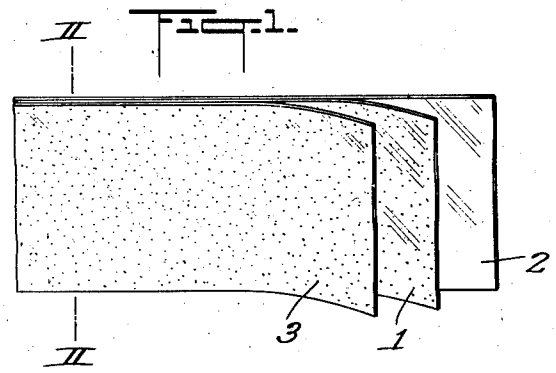


Fig. 2.

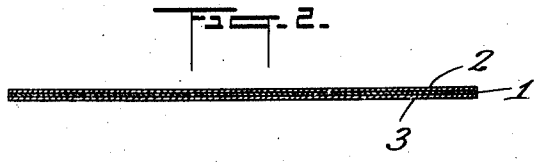
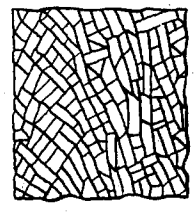


Fig. 3.



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Patented June 13, 1933

1,913,397

UNITED STATES PATENT OFFICE

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TEXTILE MATERIAL

Application filed October 31, 1931. Serial No. 572,330.

My invention relates to an improved form of textile material specially adapted to the fabrication of ladies' hats and the like.

In the manufacture of certain textile materials it is common practice to produce it in the form of a band which is cut into long narrow strips or strands that may be woven, knitted or braided into a fabric having the general appearance or texture of straw such as employed in the manufacture of straw hats. To give this material universal application in this branch of the industry it must be opaque, dye well in all shades, sew without splitting or cracking and possess considerable flexibility and/or springiness.

The fabric materials of the prior art lack one or more of these properties or characteristics. One great difficulty was to procure a material which would dye well in all shades. If it did that, it was usually found lacking in other respects, as for example, could not be sewed without cracking or splitting. Still other materials having the required property specified above could not be blocked in the blocking machines used for shaping hats, the steam employed in that operation being too severe for the material to withstand the same without collapsing.

It is, therefore, an object of my invention to provide a fabric material which may be dyed in all shades, be sewed without fracturing, be opaque, and have inherent springiness.

Another object is the provision of a textile material having all of the aforesaid properties, and at the same time be sufficiently resistant to the action of steam so as to permit a fabric made from the material to be blocked in the ordinary blocking machines employed in the manufacture of hats.

Other objects of the invention will manifest themselves upon reading the following description.

Referring to the accompanying drawing:

Fig. 1 is a perspective view, showing the laminated structure, of a material embodying the invention;

Fig. 2 is a cross section, taken on line II—II, of Fig. 1; and

Fig. 3 is a plan view of a fabric formed from braiding narrow strips or strands of the material.

In order for a textile material to be suitable for fabricating into hats, it must have considerable texture strength, which in turn is dependent upon the thickness of the material. If it is made in a single sheet of the necessary thickness to afford sufficient texture strength, generally it cannot be sewed without splitting or cracking. It, therefore, becomes necessary to produce a laminated structure which can be sewed in a satisfactory manner. In practicing the invention I form a laminated structure by using several sheets or strips of regenerated cellulose. A common commercial form of such cellulose material is exploited under the trade name of "Cellophane". It is obtainable in thin transparent sheets and in that form has a considerable lustre.

It happens that regenerated cellulose dyes well in all shades, and for that reason cellophane meets this requirement. However, if it were united with a paper inlay, this feature does not hold true generally because the paper shines through the cellophane, giving the resulting product a shoddy appearance, thereby greatly restricting its application. Consequently, to insure wide use of the material herein contemplated it has been desirable to employ cellophane uncombined with paper.

I have found that by laminating several thin sheets of cellophane a structure may be built up which has great texture strength and yet can be sewed readily without fracturing. Such a structure is shown in the drawing and may comprise an inlay of a milky white or opaque sheet 1 of cellophane between outer sheets 2 and 3 of transparent cellophane. The opaque sheet 1 gives to the finished product an opaque appearance, while the outer sheets 2 and 3 being transparent retain their lustre. The lamination of the sheets of cellophane greatly increases the inherent springiness and texture strength of the material so that it is more resilient and stronger than if composed of a single sheet of equal thickness.

The process of laminating the sheets of cellophane may comprise the use of a gelatin

adhesive between the inlay and the outer sheets, which adhesive may be applied in a heated condition (or cold) followed by passing the material through rolls. Several sheets of cellophane may be fed to the rolls, each of which run at the same speed, through suitable guides onto the calender and/or squeezing rollers. This unites the separate sheets into a coherent body. The final step is to waterproof the laminated material with any suitable waterproofing agent. The waterproofing process may comprise using a formaldehyde solution which reacts chemically with the adhesive to render it insoluble, i. e., make the adhesive itself insoluble in the dye or water.

The finished material is cut into narrow strips or strands of indefinite length and woven, knitted or braided in any suitable manner into a fabric. This fabric may take the form of a braid of any desired width convenient for handling and by sewing the running edges thereof together, a hat may be fabricated therefrom, either in solid colors or any combination of colors desired.

From the foregoing it will be seen that the fabric material contemplated by the invention is capable of being dyed in all colors or shades, is easily sewed, has a lustrous appearance as well as being opaque, and has great inherent texture strength and springiness, which makes it capable of withstanding the blocking operation.

While modifications will suggest themselves to those skilled in the art, it is my intention to cover all such modifications as come within the terms of the appended claim.

What is claimed is:

A textile supply material for weaving, knitting and braiding fabrics comprising, a laminated structure composed of a plurality of continuous thin flexible sheets of regenerated cellulose of uniform surface characteristics and equal area consolidated into a coherent body by means of an adhesive between the several sheets, one of said sheets being opaque and arranged in the form of an inlay, the outer sheets being transparent relative to the opaque sheet to provide a lustrous appearance.

In testimony whereof, I have hereunto subscribed my name this 29th day of October, 1931.

LOUIS KNECHT.