

June 20, 1961

T. D. COLE

2,989,431

DECORATIVE COTTON BATTING

Filed Jan. 8, 1959

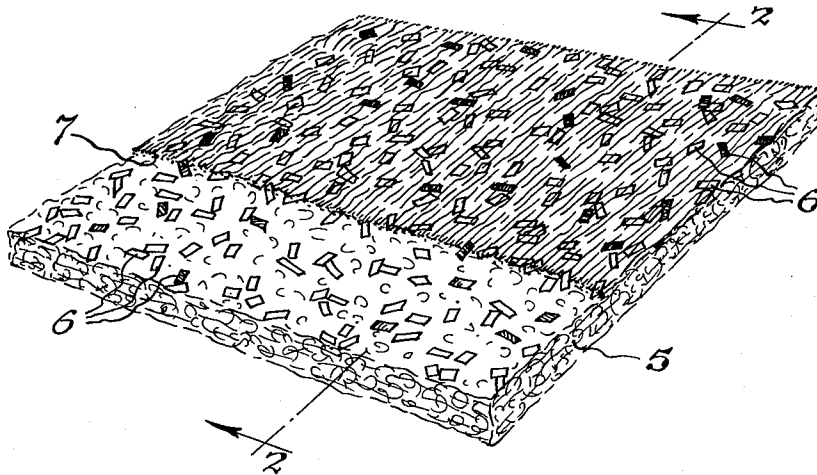


Fig. 1.



Fig. 2.

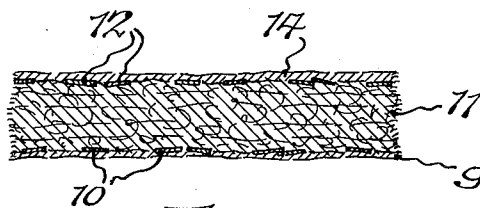


Fig. 3.

INVENTOR

Thomas D. Cole
BY
Casper & Trachnow,
Attorneys.

1

2,989,431

DECORATIVE COTTON BATTING
Thomas D. Cole, Lockport, N.Y., assignor to
Lockport Mills, Inc., Lockport, N.Y.
Filed Jan. 8, 1959, Ser. No. 785,672
2 Claims. (Cl. 154-46)

This invention relates to cotton batting having small particles or flecks of colored material incorporated therein adjacent to its outer surface.

This application is a continuation-in-part of my pending application Serial No. 409,282, filed Feb. 10, 1954, now abandoned.

Cotton batting has been used in connection with many different types of decorations because of its relatively pure, white, fluffy appearance. Colored material has also been applied to cotton batting by gluing or cementing the same to a surface of the cotton batting. I have found, however, that more artistic and pleasing effects can be produced by applying silvery and colored material to the cotton batting in a new and improved manner.

One of the objects of this invention is to provide cotton batting with silver and/or colored flecks or particles of material applied thereto during the process of manufacturing the decorative cotton batting. Another object is to provide decorative cotton batting in which the flecks or particles of silver and/or colored material are covered with a very thin outer layer of cotton fibers which holds the flecks or particles securely on the batting but which obstructs the visibility of these particles to the minimum extent. It is also another object to apply over the decorative material a thin layer of starch or other adhesive which binds the fibers of the outer layer to the particles without materially reducing the brilliance of the particles.

Other objects and advantages will be apparent from the following description of one embodiment of the invention and the novel features will be particularly pointed out hereinafter in connection with the appended claims.

In the accompanying drawings:

FIG. 1 is a perspective view of a piece of cotton batting having decorative colored bodies or silver flecks applied thereto, the upper half of the figure showing the completed decorative material in which the flecks are covered with a very thin covering of cotton fibers and the lower portion of the figure showing the flecks distributed on the cotton batting before the final cotton fibers are applied thereto.

FIG. 2 is a transverse sectional view of the finished cotton batting on line 2-2, FIG. 1.

FIG. 3 is a sectional view similar to FIG. 2 showing decorative batting of a modified construction.

Cotton batting in sheet form is generally made by depositing successive layers of garnetted and/or carded cotton, one on top of another until the batting has acquired the desired thickness. The cotton fibers of the successive layers become intermeshed or bonded together in such a manner that the successive layers adhere to each other to produce what appears to be a uniform mass of cotton fibers.

Referring to the drawings, 5 represents a mass or body sheet of cotton batting formed in this manner by successive layers of cotton fibers to which the decorative material is to be applied.

This decorative material may be of any suitable or desired type. For example, thin metal foils such as aluminum foil and tin foil can be obtained both in their natural state with a silvery type of finish, and in various colors. Colored films of cellophane or other synthetic plastics may also be used for this purpose. These foils or films can be reduced to particles or flecks of the desired sizes by cutting the foil into particles of any desired shape and

2

size. These flecks 6 are then scattered upon the body portion 5 of the decorative material in such manner that ample spaces are left on the body portion which are free from such flecks. Since these flecks are substantially flat, they will, upon being dropped on the body portion, lie in positions which are generally parallel with the surface of the sheet, as shown in the drawings.

A very thin layer of carded fibers is then placed on the body 5 of cotton batting and the flecks 6 of decorative material. This final or top layer 7 is also very open and is substantially of the thickness of a single fiber, although since it is impossible to control the thickness of the layer so that all parts of the same are uniform, there may be instances where a plurality of layers would overlap each other. It is also desirable to have this final layer 7 of such nature that all of the flecks or particles 6 of glittering material are overlapped at least by several fibers of the top layer 7. The particles 6 are scattered on the body 5 of the batting so that there is ample space between these particles in which the fibers of the top layer will bond with those of the body 5. In this manner the particles 6 will be tied or anchored to the body 5. In this manner I produce a decorative material in which the reflecting particles are so scantily covered with fibers that comparatively little of their brightness is lost and yet the particles are bonded to the body 5 so that very few of the particles are loosened from the body and drop away from the same during handling of the material.

A further improvement in the appearance of the material results if the covering layer 7 of the batting is combed or carded in such manner that most of the fibers lie approximately parallel to each other. This produces a web of gossamer appearance which, while holding the particles on the body of the material, does not materially reduce the extent to which they are visible.

In order to further prevent the particles 6 from becoming loosened from the decorative body, and to further secure the covering layer to the body 5, I apply a very thin coat of adhesive, such for example as starch, to the upper surface of the decorative material. This adhesive in a thin solution may be sprayed or otherwise applied to the top surface of the material, and by making this coat of adhesive very thin it detracts very little from the shiny appearance of the particles 6. This adhesive may be dried by passing the material through a suitable drying chamber.

If desired, the decorative colored flecks or particles may be applied to both faces of the batting, as shown in FIG. 3. This can be done by inverting the decorative material after it has been treated on one side thereof, as herein described, and then treating the other face of the material in the same manner. If desired, the material may be made by first depositing a thin gossamer web 9 of cotton fibers, similar to that described in connection with FIGS. 1 and 2, on a surface. The decorative particles or flecks 10 may then be deposited on this thin layer 9 by means of a suitable shaker or screen. A heavier body 11 of cotton fibers is then deposited on the first layer and on the decorative particles with the result that the fibers of the two layers will interlock or bond together so that the lower layer 9 will be attached to the base or body layer 11. The fibers of the lower layer 9 which extend across the flecks or decorative particles will consequently act somewhat as a net to entrap or hold the decorative particles on the mass of batting which constitutes the base of the decorative batting. After the layer 11 has been deposited, more decorative particles or flecks 12 are scattered on the surface of this body 11 and the final, very thin layer 14 of cotton fibers is then deposited upon the body layer 11 and the decorative particles 12 lying thereon in the same manner as described in connection with FIGS. 1 and 2. The two covering layers 14 and

3

9 may then be provided with a very thin coating of an adhesive material to bond the fibers of the covering 14 to the body layer 11, which bonds the fibers of the covering layers to the base to hold them against shifting and thus releasing the particles 12.

The gossamer cotton covering 7, 9 or 14, whether on the top or bottom of the cotton batting serves the purpose of holding the decorative material 6, 10 or 12 in place, and because of the very thin or scanty nature of the layers 7, 9 or 14, the brilliance or appearance of the decorative particles is only slightly subdued by the covering layer or layers, and thus produces a very pleasing appearance of the decorative batting. These covering layers cause the decorative particles to lie flatly against the body portion so that they cannot be readily brushed off from the body portion.

The adhesion of the particles of decorative material to the cotton batting is in part due to the fact that these particles, when cut from foils or films of the material, even with sharp cutting tools, leave finely serrated edges on the particles which can only be seen under a microscope. However, since the cotton fibers are also of microscopic diameters, these fibers readily interlock with the serrations on the edges of the decorative particles. By incorporating flecks of decorative material in the cotton batting, the batting loses none of its flexibility so that it can be readily shaped as may be desired for decorative purposes.

The process herein described makes it possible to produce this decorative cotton batting in an inexpensive and efficient manner. In accordance with this process the decorative cotton batting is produced in the usual manner heretofore employed except that whenever it is desired, a screen or shaker containing the decorative particles is passed over the material in the process of manufacture to deposit the colored or decorative particles. If desired a very thin coating of adhesive may be applied to the outer layer or layers of cotton.

The term "cotton" as herein employed is intended to include not only the natural cotton, but also any synthetic or natural fibers which have the property of becoming intermeshed or bonded together without an adhesive similar to natural cotton. The cotton used in connection with

4

my improvements is preferably flame-proofed, but if preferred, cotton which has not been flame-proofed may be employed to form the decorative cotton batting.

It will be understood that various changes in the details, materials and arrangements of parts which have been herein described and illustrated in order to explain the nature of the invention may be made by those skilled in the art within the principle and scope of the invention as expressed in the appended claims.

I claim:

1. Decorative batting made of a base layer of cotton batting, particles of glittering thin foil material randomly positioned on the top surface of said base layer, said particles being arranged in spaced relation to each other and having substantially flat faces which lie approximately parallel to the surface of said base layer, and a covering web in the form of an open gossamer layer of substantially one fiber thickness extending across said particles and intermeshing with the fibers of the base layer to tie said particles of material to said base layer, the fibers of said web being disposed substantially parallel to each other, said covering web being so thin that relatively few fibers of said web extend across any particle of decorative material, to leave the flat faces of the particles of said decorative material substantially unobstructed to view, and a thin layer of adhesive applied to said covering web and connecting the fibers of said web with said decorative particles and the fibers of the base layer.

2. A decorative batting according to claim 1, in which both faces of the base layer have particles of decorative material applied thereto and held in place on the base layer by an open layer of covering web.

References Cited in the file of this patent

UNITED STATES PATENTS

216,986	Waite	July 1, 1879
1,886,928	Wyss	Nov. 8, 1932
2,122,472	Hurst et al.	July 5, 1938
2,620,853	Boese	Dec. 9, 1952

FOREIGN PATENTS

22,925	Great Britain	of 1903
--------	---------------	---------