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J. O. V. STETTEN

METHOD OF FINISHING FABRICS

Filed Nov. 8, 1924

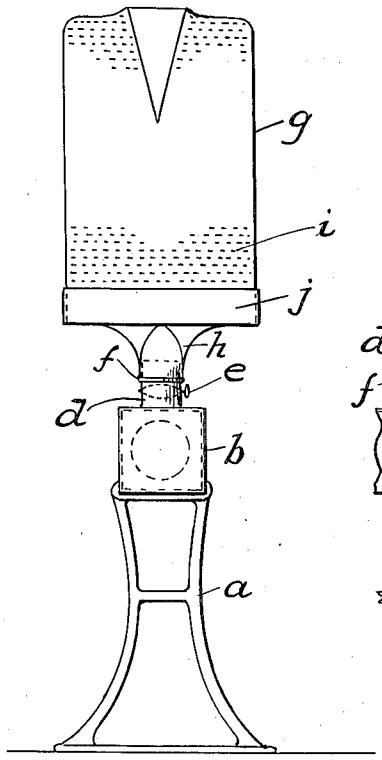


FIG. 1.

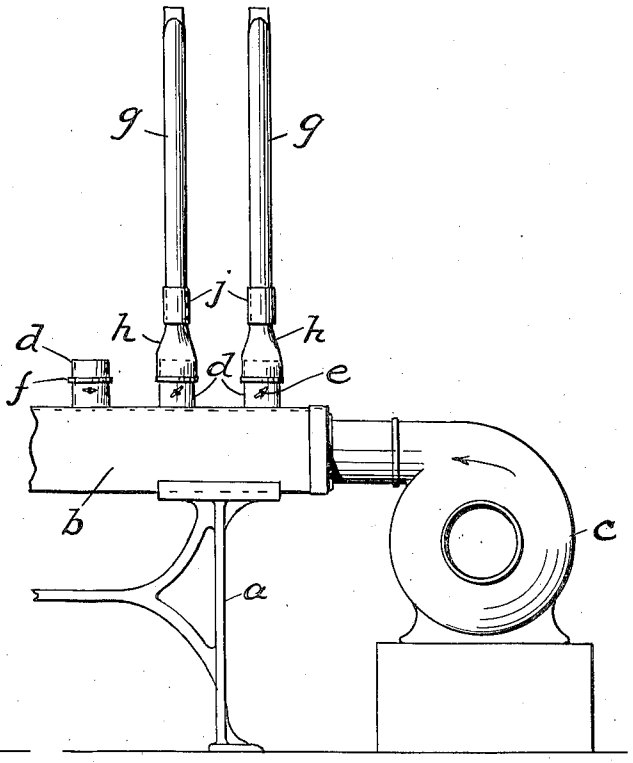


FIG. 2.

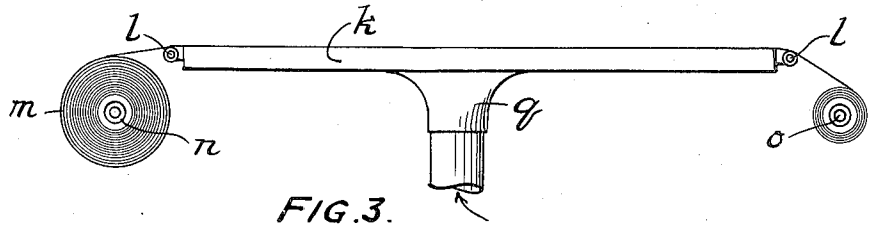


FIG. 3.

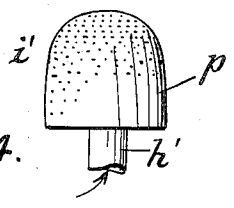


FIG. 4.

WITNESS:

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UNITED STATES PATENT OFFICE.

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METHOD OF FINISHING FABRICS.

Application filed November 8, 1924. Serial No. 748,715.

My invention relates to a method for finishing fabrics and more particularly to a method for finishing fabrics of such a character as desirably have a raised nap when finished.

Heretofore in finishing fabrics, such, for example, as wools and felts, it has been customary to brush or pick the fabric in order to raise the nap and in such fabrics, as, for example, pile fabrics, it has heretofore been necessary to brush and treat the fabric in finishing in order to raise and arrange the pile.

Now it is the object of my invention to provide a method of treatment applicable to various fabrics whereby the nap of a fabric may be raised to produce a desirable finish in a simple and expeditious manner, whether the fabric be in the piece or manufactured into articles, for example, of wearing apparel.

While the carrying out of the process embodying my invention is not dependent upon any particular form of apparatus, I will now proceed to describe in detail, with reference to the accompanying drawings, a form of apparatus and modification thereof, which will be found adaptable for the carrying out of my process in a satisfactory and efficient manner in connection with the finishing of, for purposes of example, sweaters, piece goods, and hats.

It will be understood that various forms of apparatus other than those herein described may be readily provided for the finishing of various manufactured articles in accordance with my process.

Fig. 1 is a view, in elevation, of apparatus for finishing sweaters in accordance with my invention.

Fig. 2 is a fragmentary side elevation of the subject of Fig. 1.

Fig. 3 is a side view of apparatus for finishing piece goods in accordance with my invention.

Fig. 4 is a side view of apparatus for finishing hats in accordance with my invention.

Referring to Figs. 1 and 2, *a* represents a support or frame upon which is mounted a conduit *b* closed at one end and connected at the other to a blower *c* which may be driven by any suitable mechanism.

Mounted on the top of conduit *b* at spaced intervals and in communication with the interior thereof are vertically extending pipes or tubes *d*, each provided interiorly with a damper *e* and exteriorly with a flange or collar *f* spaced from their upper ends. *g* represents a hollow form provided with a neck *h* adapted to slip over one of the tubes *d* and rest on the collar *f* about the tube, thus serving to support the body of the form and place it in communication with the conduit *b*. The walls forming the body of the form *g* are perforated as indicated by *i* and the form is so shaped as to serve to support a sweater. An imperforate belt *j* extends about the lower part of the frame *g* and is slidable upwardly to cover perforations in the lower portion of the walls when the height of the form is greater than the length of a garment supported thereon for treatment.

Referring to Fig. 3, *k* indicates a chamber having a flat perforated top of the proper width for the goods to be treated, which is relatively wide and provided with a neck *q* in communication with its interior through its bottom wall and adapted to be connected to a blower. Adjacent the ends of the chamber are mounted supporting rollers *l* adapted to support a piece of fabric *m* which may be drawn over the perforated top of the table from a supply roller *n* to a receiving roller *o*.

Referring now to Fig. 4, *p* indicates a hollow form for the support of a hat, the walls of which are perforated as indicated at *i'* and which is provided with a neck *h'* adapted to slip over one of the tubes *d* and support the form.

In the carrying out of my invention, for example, in finishing the fabric of which a sweater or similar garment is made, which may be knitted wool with which a fuzzy fluffy finish is desired, the sweater, in a dry condition, is applied to the form *g* as shown in Fig. 1 and the blower put in operation. The blower is afforded a supply of relatively cold air or air at normal or room temperature and blows the air into conduit *b* from

which it passes to the interior of form *g* and from thence through the perforations in the walls thereof and through the fabric of the sweater. The blower gives sufficient force to the air to cause it to arrange and fluff up or cause to extend toward and beyond the outer surface or face of the sweater the fuzz on the strands of wool of which the sweater is knit, with the result that the outer surface of the fabric of the sweater is given a fluffy soft finish.

In the application of my invention to the finishing of piece goods which, for example, may be pile fabric, the pile of which, prior to finishing, is flattened down, the dry piece goods are passed over the perforated top of chamber *k* with the face of the fabric uppermost and subjected to the action of air which raises and arranges the pile to give to the goods a soft finished appearance.

In the finishing of such materials as felts utilized in the production of felt hats, the hat is placed on the form *p* and the fabric subjected to the action of air passing out from the interior of the form.

It will be understood that I do not intend that my invention shall be limited to the application described above by way of illustration, since it is obvious that there may be a variety of applications without departing from the spirit thereof.

Having now fully described my invention, what I claim and desire to protect by Letters Patent is:

1. The method of finishing fabrics comprising supporting the back of the fabric to be treated on a perforated surface having substantial length and breadth and forcing a current of air through the perforations and a substantially long and wide portion of the fabric to cause the nap on the face of the fabric to project in a plane normal to the plane of the fabric from which the nap extends.

2. The method of finishing shaped fabrics comprising the steps of applying the fabric to a perforated hollow form of substantially the shape of the fabric and forcing a current of air through the perforations in the form and the fabric to cause the nap on the outer face of the fabric to project at an angle substantially normal to the plane of the fabric from which it extends.

In testimony of which invention, I have hereunto set my hand, at Philadelphia, Pennsylvania, on this 5th day of November, 1924.

JULIUS O. V. STETTEN.