

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN PROCESSES OF TREATING BED, CUSHION, AND LIKE STUFFINGS AND CARPET-LININGS.

Specification forming part of Letters Patent No. **219,142**, dated September 2, 1879; application filed May 20, 1879.

To all whom it may concern:

Be it known that I, WILLIAM N. BLAKEMAN, JR., of the city of New York, in the county and State of New York, have invented a new and useful Process of Treating Bed, Cushion, and like Stuffings and Carpet-Linings, for the purpose of rendering said materials elastic, or more highly elastic, and of a more durable character, which process is fully set forth in the following specification.

The invention herein set forth and claimed consists in covering, permeating, or filling the stuffing and lining materials above mentioned with oleaginous, viscous, or gelatinous matter, for the purpose of imparting to said materials the qualities above mentioned.

The method, therefore, of applying such matter in the various ways deemed by me to be the best and most trustworthy in securing the objects to be kept in view will now be fully set forth.

In carrying out my invention I select as materials to be treated, depending upon the desired quality or cost of the article to be stuffed, sponge, hair, shred-wood or "excelsior," shavings, asbestos, sea-weed, moss, corn-husks, felt, wool, any material suitable for carpet-lining, or any material of a fibrous or cellular structure. Having selected the stuffing material to be treated, I subject the same to my process, in which I generally employ a number of substances, no one of which, nor the same combination of substances, being, probably, equally well adapted to each particular stuffing material treated; but as the mode of applying all of the substances used in treating the stuffing materials and the resultant effects upon such materials are in a measure analogous, I will here generalize the substances used by me under the classes or heads of the drying-oils, the soluble gums, and the gelatines, in combination with agents, such as oxidizers, styptics, or astringents, as hereinafter more particularly described.

In the use of the oils I will select for description of my process linseed-oil, in which the stuffing material selected may be steeped to saturation, more or less, dependent upon the natural softness, pliability, or stiffness of the material. With the oil may be used a small quantity of litharge, peroxide of lead, or other

drying agent in commercial use, in order to assist in or hasten the oxidation of the oil. The stuffing material thus treated should then be taken out of the oil and dried, the excess of oil being removed by pressure, artificial heat, or otherwise, as may be most desirable.

In the use of the gums I will select for description of my process gum-arabic, and, having made a thick solution of the same by exposure in a water-bath, I add glycerine and an oxidizing agent, such as peroxide of lead, or an equivalent oxidizer, to said solution, and with or into which solution the stuffing material selected is coated or steeped and then dried, as before mentioned. In this case a small quantity of linseed-oil, treacle, or molasses may be substituted for the glycerine; but the glycerine I consider the best for the purpose.

In the use of the gelatines I will select for description of my process commercial glue, and, having made a solution of the same by exposure in a water-bath, I add a deliquescent salt, such as calcium chloride, or an equivalent chemie agent, to said solution, and with which solution the stuffing material selected is treated and then dried, as before mentioned.

It may be possible, in some cases, to apply the gums or gelatines in a simple or spirit solution or tincture without the chemie agents above mentioned, and to trust to time, pressure, or artificial heat to sufficiently dry the stuffing material so treated.

Any or all of the above-mentioned stuffing materials, when treated in the manner above described, or with equivalent substances, will be found, after such treatment, to be coated with a cover or filler resembling a varnish, of a more or less elastic character, whereby the material so treated will be rendered elastic, or more permanently elastic and of more body than in the natural state, and also more durable.

It may be possible, also, to use caoutchouc in the treatment of some of the above-mentioned materials, as it has already for years been combined, in various ways, with a great variety of articles; but it would be an expensive adjunct in this process on account of its cost, and, if vulcanized, the degree of heat necessary for its vulcanization would be inju-

rious to a great many of the materials used for stuffings.

I do not limit myself to any exact proportions of the ingredients used in this process, and may vary the same in number and quantity, as practice shall determine to be desirable, in order to produce the best effects; and, while it is evident that drying-oils are the best suited among unctuous or fatty substances used, yet it is possible to so treat glycerine with peroxide of lead or other oxidizer as to obtain a solid residuum or scale. Glycerine, when so treated, therefore, I consider to be within the scope of my invention, although I do not regard it as a very available agent when so treated.

If it be desired to impart a poisonous or more poisonous character to the stuffing materials treated by my herein-described process, in order to repel the attacks of insects, such poisonous quality may be imparted by the addition of arsenic or any other suitable poisonous agent without departing from the principle of my invention or interfering with its complete operation.

I am aware that it has been proposed to soften ground cork for stuffing material by simply manipulating it with oil, and also to

stuff mattresses with layers or sheets of cotton-batting having the surface of each sheet glazed in the ordinary way of preparing such glazed batting of commerce. Such mere treatment, therefore, of such materials is not within the scope of my process herein described, and the invention of said treatment I do not claim; but as of my invention

I claim—

1. The process of treating bed, cushion, and like stuffings and carpet-linings, consisting of covering, permeating, or filling the same with oleaginous, viscous, or gelatinous matter, whereby the stuffing and lining qualities of said materials are improved, substantially as set forth.

2. The process or method of imparting to bed, cushion, and like stuffings and carpet-linings additional or artificial elasticity, spring, or body, consisting of treating said materials with one or more of the oils, gums, and gelatines described, and causing the same to dry thereon, substantially as and for the purposes set forth.

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Witnesses:

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