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WALL COVERING AND THE LIKE

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The present invention relates to surface coverings of fibrous material, and more in particular to such coverings which have been treated with an odor emitting substance.

Among the objects of the present invention is to provide a novel wall covering having incorporated within the body thereof any suitable odor emitting substance, and to form said covering in such a way that the odor from said substance is retained by the material and gradually emitted over a period of time after the covering has been applied to a wall or the like.

Another object of the present invention is to provide a novel wall covering as immediately hereinabove described, in which a retardant is incorporated therein to prolong the diffusion of the odor from the substance by slowing down the evaporation of the same.

The invention comprehends the application of an odor emitting substance to a wall covering in the form of a sheet of fibrous material, which is treated on one or both of its surfaces with a sealing agent adapted to decrease the permeability of the fibrous stock, whereby the odor is more effectively retained within the fibrous structure of the sheet and gradually emitted after the covering is applied to a wall structure or the like.

The invention is further characterized as involving the use of a retardant, as above mentioned, which has the added function of decreasing the diffusion of the odor from the substance applied to the covering, to thus prolong the useful life of the covering as applied to the wall and to assure the more gradual diffusion of the odor into the room in which the walls are surfaced with such covering.

The invention in another of its aspects contemplates incorporating a suitable odor emitting substance in a sheet of fibrous material, sealing the same by application of a suitable sealing agent to one of the surfaces thereof, and to apply in the manufacture of the wall covering an adhesive which may have an odor emitting substance incorporated therein so that upon application of the covering to a wall structure or the like, such odor will be diffused upon moistening of the adhesive in the hanging or application of such covering to the wall or the like.

A still further object of the present invention is to form wall coverings as immediately hereinabove described, in which suitable retardants are used to assure a more gradual diffusion of the odor emitting substance from the covering over greater periods of time.

Other objects, features, capabilities and advantages are comprehended by the invention, as will later appear and as are inherently possessed thereby.

While the invention contemplates wall coverings of various types in which some suitable odor emitting substance has been incorporated, nevertheless for the purposes of this application reference will be made to a pre-pasted wall paper made from paper stock and treated with oil of cedar to secure, as the finished product, a paper simulating cedar wood, and which finds use as a wall covering for closets or the like where it is desired to protect articles of clothing and the like from moths or other insects. The paper in its finished form may be readily applied to the surfaces of such closets or other compartments, and is adapted to gradually give off the odor from the oil of cedar to repel moths and other insects, thus protecting articles of clothing and apparel which may be stored therein.

According to the present invention as it relates specifically to the use of oil of cedar as an odor emitting substance, the layer of paper stock may have printing applied to one surface thereof which simulates the grain of cedar wood. While this is not essential, nevertheless such printing has a certain decorative appeal, and where the paper is applied to closets or other like compartments, the effect is similar to that to be secured by the use of cedar wood in the formation of said closet or the like. The procedure involved in manufacturing such a wall covering further includes the application of a sealing agent to the printed side of the paper stock. This sealing agent renders the surface of the paper stock substantially waterproof, thus making the surface washable, which is highly desirable in a product of this kind. Furthermore, the sealing agent has the property of closing the pores of the paper stock thus decreasing its permeability and greatly decreasing the diffusion of the odor emitting substance incorporated within the said paper stock.

A suitable sealing agent may comprise a layer or coating of plastic material, one illustration being as follows:

1 part 28% ammonia solution
12 parts dry casein (commercial paper makers casein)
58 parts of water
Formaldehyde in the amount of 15% of the dry casein used

The parts used of the various ingredients for preparing the above sealing agent are by weight, and the percentage of formaldehyde which is

used is a proportional part by weight of the dry casein which is used in the mix. These ingredients mixed in the above proportions may be readily applied to the surface of the paper stock and allowed to dry. Upon drying, such a mix results in a casein plastic admirably suited for the purpose intended.

Following the application of the sealing agent to the printed side of the paper stock, the odor emitting substance may be applied to the other side of the paper stock. It has been found desirable in the case of the application of cedar oil to the paper stock to apply the same as a water emulsion to which is added a suitable retardant. For example, the oil of cedar and retardant may be mixed together, after which the same may be formed into a water emulsion by the application of suitable quantities of water. In accordance with the specific illustration of the invention herein being described, one part of rosin-size may be mixed with from 4 to 20 parts of oil of cedar. The oil of cedar used in this mix is preferably that which is obtained from cedar wood, although it is possible to use the oil obtained from cedar leaves. To one part of the above mixture water is added in the proportions of from one to two parts to form the water emulsion. As in the previous illustration, all parts herein specified are parts by weight of the various ingredients used. Such a water emulsion may be applied in any desired manner to the uncoated side of the paper stock, immediately after which a suitable adhesive is applied without the drying of the mix including the odor emitting substance. Any suitable paste or adhesive may be used, such for example as described in the Bauer Patents Nos. 2,183,532, 2,215,846, 2,215,848 and 2,215,849.

In order to secure a very definite odor of cedar oil at the time this wall paper is applied, the adhesive may have oil of cedar mixed therewith in the proportion of 2½% by weight of the adhesive used. Preferably, the oil of cedar should be the oil obtained from cedar leaves for the reason that the odor from such oil is diffused more readily upon application of water to the adhesive than would be obtained were the oil from cedar wood used. In order to retard the diffusion of the odor from the cedar oil incorporated in the adhesive, rosin-size may be incorporated into the adhesive. According to the specific illustration of the invention herein being described, approximately 9 parts by weight of adhesive or paste may be used to approximately one part of rosin-size.

It may be stated that the rosin-size used in practising the present invention is a commercial product, well-known to the paper industry.

After the adhesive mix has been applied to the paper stock in any desired manner, the same is allowed to dry and the resulting sheet of paper formed into rolls, preferably sealed to retain the odor incorporated therein until the same is used, and packaged in a suitable merchandising container, all in accordance with usual commercial procedures.

While the above procedure has been found highly desirable in forming a pre-pasted wall paper incorporating an odor secured from oil of cedar, nevertheless the present invention contemplates such a wall covering incorporating other substances, such as perfumes and the like, which diffuse or emit odor in the same manner as oil of cedar. Such papers may be formed in accordance with the above procedure to render the paper stock less permeable, so as to retain and gradually emit the odor from the incorporated substance over periods of time.

While the above description is directed to a prepasted wall paper, nevertheless the invention in its broadest aspect contemplates wall coverings in which adhesive may not be applied during the process of manufacture. Futhermore, either or both sides of the paper stock may be sealed to enclose and contain the odor from the substance incorporated therein and to prevent the diffusion thereof when applied to a wall structure or the like. For example, the paper stock may be treated with a sealing agent and have the odor emitting substance incorporated therein, the sealing agent being applied to that surface which would form the exterior surface of the wall or like structure to which the same might be applied. On the other hand, if it is desired to assure the retention of the odor emitting substance over long periods of time, it might be desirable to treat both sides of the paper stock by applying a sealing agent in the manner above described.

While we have herein described various embodiments of the invention, it is to be understood that the invention is not limited thereto, but may comprehend other constructions, arrangements of parts, details and features without departing from the spirit of the invention.

We claim:

1. As an article of manufacture, a pre-pasted wall paper characterized as having a printed surface simulating cedar wood and having oil of cedar together with a retardant therefor incorporated into the paper stock, said wall paper having its printed surface treated by the application of a casein plastic coating to decrease the permeability of the paper stock whereby the odor from said oil of cedar is retained by said paper stock and gradually emitted after application to a wall or the like, said wall paper being further characterized by having a coating of adhesive applied to the opposite side thereof which has incorporated therein, oil of cedar and a retardant therefor.

2. A wall paper according to claim 1, in which rosin-size is used as a retardant for the oil of cedar.

3. A wall paper according to claim 1, in which the oil of cedar incorporated into the paper stock is obtained from cedar wood and the oil of cedar incorporated into the adhesive is obtained from cedar leaves, and in which the retardant for both is rosin-size.

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