

## UNITED STATES PATENT OFFICE

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DISINFECTANT AND DEODORIZER

No Drawing.

Application filed September 20, 1928. Serial No. 307,342.

This invention relates to a disinfecting and deodorizing device.

It is an object of this invention to provide a device that will absorb relatively large volumes of volatile substances, such as disinfectants, deodorizers, perfumes and the like and which will later permit vapors of these liquids to be slowly given off.

It is a further object of this invention to provide a disinfecting and deodorizing device in the form of a wooden block or the like.

Other and further important objects of this invention will become apparent from the following description and appended claims.

I have found that certain light woods, as for example balsa, may be compressed to form a yielding porous substance admirably adapted to absorb liquids, such as perfume oils, disinfectants and the like.

In its preferred form, my invention comprises soaking a block of balsa, or other light wood in the desired disinfecting or deodorizing liquid and then compressing the block in a direction at right angles to the grain to produce a block of approximately one-half the original thickness. The compression breaks down the fibre binding material of the wood sufficiently to produce a springy, porous block.

The liquid in which the block of wood is soaked may be a mixture of gums, resins, essential oils and essential oil compounds or any desired perfuming or disinfecting liquid. Preferably, however, a gum or resin is mixed with the volatile perfuming or disinfecting liquids especially so when such liquids are highly volatile, the gum or resin in such instances acting to retard the rate at which the volatile liquids are emitted from the block.

The block becomes thoroughly saturated and permeated with the liquid, the excess being expelled during the compressing of the block. Because of the myriad of pores and cells in the treated block, the saturating liquid is slowly volatilized from the block, capillary action causing the liquid in the interior of the block to work outwardly to the surface.

It will be understood that while a block of some light wood such as balsa is peculiarly adapted to my purpose my invention may

take other forms. For instance, a block or mass may be made from pulp fibers matted or molded together under pressure and permeated with a disinfecting or deodorizing liquid, or other relatively volatile liquid.

A device such as described may when impregnated with a perfume, be used as a sachet or it may be placed in the room on a desk, table or the like. Similarly a block impregnated with a disinfectant may be used in toilets and like places.

Where the impregnated block is to be used in conspicuous places, I prefer to make the block in the form of a log. For this purpose, a block, after being soaked in a perfuming liquid or the like, is put between suitable stamping dies and the block formed to the desired shape. The excess of perfuming liquid is expressed during the stamping operation.

I am aware that numerous details of the process may be varied through a wide range without departing from the principles of this invention, and I, therefore, do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. A disinfecting and deodorizing device, comprising a porous block of balsa wood impregnated with a volatile disinfecting and deodorizing liquid.

2. A method of forming a disinfecting and deodorizing device, which comprises soaking a block of balsa wood in a suitable, relatively volatile liquid and strongly compressing the mass to express the excess of liquid and render the mass porous and springy.

3. A device of the class described, comprising an impregnated block of balsa wood which has been compressed to expel excess impregnating liquid and render the block more porous by breaking down the fibre binding material.

4. A disinfecting and deodorizing device comprising a block of balsa wood impregnated with a gum and a volatile fumigating liquid.

5. A method of forming a disinfecting or deodorizing device which comprises impregnating a block of balsa wood with a gum and

a volatile disinfecting agent and compressing the block to a desired form at the same time expressing any excess of the impregnating substances from the block.

5 In testimony whereof I have hereunto subscribed my name at Chicago, Cook County, Illinois.

FRANCIS J. CURRAN.

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