

UNITED STATES PATENT OFFICE

2,134,898

PROCESS OF BLANCHING WOOD OR LIKE MATERIALS

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No Drawing. Application May 5, 1934,
Serial No. 724,218

14 Claims. (Cl. 8—2)

This invention relates to a process of blanching wood and other solid fibrous material.

A principal object of the invention is the provision of a process for blanching or bleaching the surface of veneer, plywood, solid wood, or wood substitute such as paper, fibreboard, cellulose board and the like.

Another important object of the invention is the provision of a process in which a differential treatment of the surface of the material may be carried on over selectively determined areas of any size or contour to give to them a distinctive appearance as to coloring or shading as compared with surrounding or adjacent areas.

A further important object of the invention is the provision of a process which permits of this blanching or bleaching treatment over selected areas by persons not particularly skilled in the art, and at a greatly reduced cost.

Numerous other objects and advantages of the invention will be apparent as it is better understood from the following description.

The process embodying my invention is or may be carried out in a succession of treatments which may follow each other immediately or may be timely separated. In the first step of the process, the surface to be blanched is coated with a layer or blanket of viscous material. This prepares the wood or other material underneath the blanket for the reaction with the bleaching agent subsequently to be applied, and also serves to confine the action of the bleaching agent to the particular area being treated. The next step of the treatment consists in the application of the activator or neutralizer which primarily consists of a strong bleaching agent, several of these being available on the market.

The blanket material, which is applied with a brush, sponge or the like to the surface to be treated, consists of an adhesive and a carrier for the same, and it has sufficient body consistency so that it will not run or spread beyond the surface or area portion to be treated. Glycerine or casein may be employed as the adhesive ingredient while the carrier may be composed of kieselguhr, infusorial earth, magnesium carbonate, aluminum sulphate, or other suitable material.

The adhesive and the carrier give to the material a thick syrupy body which permits it to be spread or stencilled on a particular surface or area within sharply defined boundary lines and to this adhesive and carrier is added a substance which imparts acidity, such as sulphonic or acetic acid, or which imparts alkalinity, such

as caustic soda, ammonia, etc. As has been stated this coating or blanket material is of such consistency that when spread over a selected area portion to be treated there is no danger of its running or spreading to adjacent areas and affecting the finish on such areas.

After this blanket has been placed in position for a predetermined length of time, which period varies with different woods and with the degree of bleaching action to be accomplished, a neutralizer or activator is applied to constitute a finishing coat. This finishing coat carries out the bleaching action and any of the well known bleaches may be used, such as peroxide of hydrogen, potassium persulphate, potassium perborate, ammonia borate, etc. Danger of harm to the finish of adjacent surfaces is negligible because should the bleaching agent flow beyond the border of the surface being treated, it may be readily wiped off and leave the surface unmarred due to its slow bleaching action.

It is possible by proper application of the blanket and proper selection of the activator or finishing coating to be subsequently applied, to bleach or bleach any fibrous material. Not only solid woods may be treated by my special process, but veneers, which have become streaked or are undesirably colored, may be refinished so that their appearance is entirely changed.

Where it is desired to refinish the entire surface without producing a distinctive appearance to a selected portion thereof, the blanket material may be diluted with ammonia, or other catalytic agent, and water. This pre-treated fibrous material may then be finished by the application of a strong bleaching agent (where peroxide is used as a bleaching agent, ammonia or some other catalytic agent may be employed effectively to release the oxygen upon its application).

It has also been found that the blanket or initial coating may be formed of sulphite pulp, or like material, pressed into sheet form and dried to permit it to be cut into patterns, shapes, stencils or designs, which are placed on the surfaces to be blanched or bleached in localized or desired areas. This cellulose blanket is impregnated or coated with a substance of active catalytic reaction to desired bleaching agents.

It is thought that the invention and many of its attendant advantages will be understood from the foregoing description, and it will be apparent that various changes may be made in the steps and their order of accomplishment of the process described without departing from the spirit and

scope of the invention or sacrificing all of its material advantages, the process hereinabove described being merely a preferred embodiment thereof.

5 I claim:

1. The process of treating a desired limited area of a compact fibrous material, comprising applying to such limited area only a blanket of viscous preparatory material, and subsequently applying to said limited area an agent adapted to bleach the fibrous material.

2. The process of treating compact fibrous material, comprising applying to a selected surface to be treated a coating of viscous preparatory material, and subsequently applying to said surface an agent adapted to bleach said fibrous material, said preparatory material including a catalytic agent which will speed the action of said bleaching agent.

3. The process of preparing compact fibrous material for bleaching, comprising applying to a selected surface of the material to be treated a viscous coating of preparatory material comprising an inorganic mineral carrier and an adhesive for vegetable materials.

4. The process of treating a desired limited area of a compact fibrous material, comprising applying to such limited area only a blanket of viscous preparatory material including glycerine and a soluble carrier therefor, and subsequently applying to said limited area an agent adapted to bleach the fibrous material.

5. The process of treating a desired limited area of a compact fibrous material, comprising applying to such limited area only a blanket of viscous preparatory material including casein and a soluble carrier therefor, and subsequently applying to said limited area an agent adapted to bleach the fibrous material.

6. The process of treating compact fibrous material, comprising applying to a selected surface to be treated a coating of viscous material including glycerine and a suitable carrier therefor, and subsequently applying to said surface an agent adapted to bleach said fibrous material, said preparatory material including a catalytic agent which will speed the action of said bleaching agent.

7. The process of treating compact fibrous material, comprising applying to a selected surface to be treated a coating of viscous material including casein and a suitable carrier therefor, and subsequently applying to said surface an agent

adapted to bleach said fibrous material, said preparatory material including a catalytic agent which will speed the action of said bleaching agent.

8. The process of preparing compact fibrous material for bleaching, comprising applying to a selected surface to be treated a viscous coating of preparatory material having an alkaline reaction and including an inorganic soluble mineral carrier and a vegetable adhesive.

9. The process of preparing compact fibrous material for bleaching, comprising applying to a selected surface to be treated a viscous coating of preparatory material having an acid reaction and including an inorganic mineral carrier and an adhesive for vegetable materials.

10. The process of preparing compact fibrous material for bleaching, comprising applying to a desired limited surface thereof a viscous coating of preparatory material comprising glycerine and an inorganic mineral carrier.

11. The process of preparing compact fibrous material for bleaching, comprising applying to a desired limited surface thereof a viscous coating of preparatory material comprising casein and an inorganic mineral carrier.

12. The process of preparing compact fibrous material for bleaching, comprising applying to a selected surface to be treated a viscous coating of preparatory material including sulphonic acid, an inorganic mineral carrier and an adhesive for vegetable materials.

13. The process of preparing compact fibrous material for bleaching, comprising applying to a selected surface to be treated a viscous coating of preparatory material including acetic acid, an inorganic mineral carrier and an adhesive for vegetable materials.

14. The process of bleaching a desired limited area of a compact fibrous material, comprising applying to the surface of said fibrous material a sheet of cellulose cut to the desired shape, and subsequently applying to said sheet of cellulose a bleaching agent, said sheet of cellulose being impregnated with a preparatory material comprising an inorganic mineral carrier and an adhesive for vegetable materials, and said bleaching agent being adapted to soak through said sheet of cellulose and act with said preparatory material upon said desired limited area of the compact fibrous material.

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