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PROCESS FOR BLEACHING WOOD

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4 Claims. (Cl. 8—111)

This invention relates to a simplified and inexpensive method or process for bleaching wood, or the like, and especially wood to remove natural streaks, and is particularly applicable where the wood is to be used dressed, as in the manufacture of furniture therefrom, or after manufacture of assembled furniture.

The invention aims generally to provide a method which is expeditious, does not require the aid of heat and a final washing, but which produces a surface of a more uniform and permanent color.

In carrying out the invention, I use sodium peroxide and hydrogen peroxide. The sodium peroxide, as used, is a saturated solution thereof in water, for instance, of approximately 400 to 480 grams per gallon of water, while the hydrogen peroxide is preferably a 30%, 100 volume solution.

To the dressed wood, I apply the water solution of sodium peroxide in any suitable manner, as by sponging, brushing, dipping, or spraying. Such solution is then permitted to dry and it effects an initial bleaching. The time required for such drying is usually about one hour, although it may be permitted to dry longer without disadvantage. Thereupon, over the dried surface to which the said sodium peroxide solution was applied, I apply evenly, the solution of hydrogen peroxide in any suitable way, as by sponging, brushing, dipping, or spraying. A semi-violent reaction occurs and further bleaching of the wood ensues and continues until the wood is dry. It will thus be seen that in addition to the other functions of the hydrogen peroxide, it continues and amplifies the oxidizing function of sodium peroxide.

The process may be reversed, that is, by using the hydrogen peroxide first and thereafter using the sodium peroxide, but experiments have shown that by using the solution of sodium peroxide followed by the solution of hydrogen peroxide gives the best results.

Attention is called to the fact that it is unnecessary to heat either of the peroxides mentioned or the wood, and, in fact, the process is carried out entirely at ordinary or room temperature.

Sufficient depth of bleach is obtained as the wood may be sanded on a power driving belt sanding machine. Such a depth may be obtained even where the peroxides are applied merely by sponging.

In the present method, the two peroxides neutralize or so affect each other that it is not necessary to wash the bleached surface of the wood with either hot or cold water, after application and drying of the peroxides, and, hence, such surfaces may be immediately painted or otherwise finished or ornamented.

The method makes practical the bleaching of assembled furniture or so-called case goods.

Tests have shown that no reaction whatsoever takes place as a result of the use of the peroxides after the wood is finished, thereby especially overcoming any tendency to whiten, peel, or affect the finish.

Practically any wood may be bleached by the process, particularly gum woods. A greater uniformity of color of the bleached wood is obtained, which especially makes it unnecessary for the shading or toning out of dark streaks.

It is to be understood that the strength of the two peroxide solutions may be varied, as desired, according to the wood to be bleached.

What is claimed is:

1. The method consisting in subjecting wood to the action of a saturated solution of sodium peroxide, permitting the sodium peroxide to dry, and in subjecting the treated portion of the wood to the action of an approximate 30% solution of hydrogen peroxide in such quantity as to completely neutralize the sodium peroxide.

2. The method consisting in applying sodium peroxide to wood, permitting the sodium peroxide to dry, and in applying hydrogen peroxide to the same zone of the wood treated with said sodium peroxide, said peroxides being used in such proportions that the one peroxide completely neutralizes the other.

3. The method of bleaching with sodium peroxide and hydrogen peroxide, which consists in treating wood with one of said peroxides, drying the said one peroxide and then applying the other peroxide to the zone so treated in such quantity as to completely neutralize the said one peroxide.

4. The method of bleaching wood at normal temperature with sodium peroxide and hydrogen peroxide at normal temperature, consisting in applying one of said peroxides to the wood, drying the said one peroxide, and then applying the other peroxide to the zone so treated, and drying the said other peroxide, said peroxides being used in such proportions that the one peroxide completely neutralizes the other.

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