UNITED STATES PATENT OFFICE.

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PROCESS FOR REMOVING PAINT AND VARNISH.

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To all whom it may concern:

Be it known that I, FRED B. CASMIRE, a citizen of the United States, and a resident of Chanute, in the county of Neosho and State of Kansas, have invented certain new and useful Improvements in Processes for Removing Paint and Varnish, of which the following is a specification.

My invention relates to improvements in processes for removing paint and varnish from furniture, such as school desks and the like, and it consists in the steps hereinafter described.

The removal of paint and varnish from furniture with the use of strong alkalis, such as soda lye, has up to the present time been accompanied with certain results which have hitherto prevented the successful use of these substances on any extended scale. In the first place the injurious effect upon the wood, such as the raising of the grain, and discoloration, leaves the wood in a condition which does not permit it to be refinished without subsequent operations, such as sand papering, etc. Furthermore, the use of strong alkalis tends to injure the subsequent applications of varnish or paint, since the wood will take up a sufficient quantity of the alkali so as to render the subsequent coats extremely liable to disintegration.

Besides these defects, the alkalis have an injurious action on the hands and clothing of the user, when such alkalis are used in the ordinary proportions.

I have found by experiment that if these alkalis are used in very weak solution in boiling water, the paint or varnish will be completely removed, but the other injurious effects mentioned above will not follow.

An object of my invention is to provide a process by means of which varnished or painted articles may be quickly and completely cleaned of paint without loosening the glued joints and without raising the grain of the wood, but leaving the wood in condition to be immediately revarnished or redressed without even sand papering.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claim.

In carrying out my invention I provide a mixture consisting of soda lye and sal soda in the proportions of 36% of soda lye and 64% of sal soda. Fifteen pounds of this mixture is then dissolved in ninety gallons of water to which ten ounces of bluing, for instance, indigo, is added. The mixture is now brought to a boil and the articles of furniture, such as school desks, are lowered into the boiling mixture where they are left from two to five minutes. The articles are then removed and any of the softened varnish which adheres, is brushed off. The articles are then washed off thoroughly with cold water and left to dry.

The above described process has the following advantages: In the first place, the wood is left in substantially as good condition as it was prior to the application of the original coat of varnish or paint; it requires no sand papering whatever, and the glued joints are not affected. No care is necessary in preventing the solution reaching the hands of the workmen, because it does not injure the hands, being so weak. The wood after drying has its natural color, that is to say, it is not in the least charred or darkened, as is the case with strong alkali such as ammonia. The materials are such as are found anywhere and are comparatively cheap.

From the above description it will be seen that the actual composition of a gallon of the paint or varnish remover is sal soda 1.70 ounces, soda lye .96 oz. and .11 oz. of bluing. The amounts of the alkali are so small as not to have an injurious effect on the hands, and it would appear that the amounts are too small to be of service in the removal of paint, but as stated above, I have found that this composition in actual practice when heated, will do the work quickly and satisfactorily.

The alkali solution herein set forth is given as an example. Other alkali solutions might be used without departing from the spirit of the invention, the main point being that such small quantities are used, that ordinarily one would say that the paint could not be removed, while actual practice shows that the paint can be effectively removed with the small quantities of alkalis in

solution, while eliminating the after effects due to the use of relatively large quantities of alkali in solution.

I claim:

The herein described process for removing paint, varnish or the like from furniture, which consists in immersing the article to be treated in a hot comparatively weak alkali solution, consisting of soda lye, sal soda and water in substantially the proportions of 1 gallon of water, .96 oz. soda lye, 1.70 oz. of sal soda, removing the article after a period of from two to five minutes, removing any traces of remaining varnish or paint, washing the article, and subsequently drying it.

FRED B. CASMIRE.