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CONTAINER COATINGS

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3 Claims. (Cl. 91—68)

Our invention relates to an improvement in container coatings, and is particularly designed to preserve metallic and wooden containers and to avoid the contamination of stored liquids by the inner surface of the container.

It is common practice to employ pitch as a coating for kegs and vessels used for the storage of liquids, particularly in the brewing industry. This pitch may comprise anything from rosin to asphalt. This pitch coating is undesirable for a plurality of reasons. It often contains impurities to injure the liquid stored in the container. Pitch often chips or cracks off, exposing the container surface. Furthermore, the high temperatures necessary in the application of this pitch often injure the chemical structure of the coating.

Our coating has the advantages of better adhesion to the container, thus greatly diminishing the chances of having the coating separate from the container surface, exposing this container surface to the liquid stored. Our coating is designed to adhere more firmly than the usual pitch coating to both wood and metal surfaces.

Our coating has higher moisture-proofing qualities than the usual pitch coating, thus obviating the danger of having the stored liquid work through the coating into contact with the surface of the container. Moreover, our coating is provided greater plasticity, thus virtually obviating any chipping or cracking of the coating. As a result, once a container is coated it is virtually impossible for stored liquid to contact the surface of the container.

It is also a feature of our coating that lower temperatures are required to melt the coating, thereby avoiding excessive heating of the composition, which is apt to produce a chemical cracking and give rise to water soluble products which will contaminate aqueous solutions such as beer.

It is an added feature of our invention that no solvent is required to evaporate. Our coating is applied by means of a standard keg coating equipment, or by spraying or painting. The coating is thus particularly adapted for use in coating wooden or steel kegs used in the brewing industry.

The coating of our invention consists in mixtures of resinous substances, waxy substances, and suitable hydrocarbons to obtain the desired results.

In general, our formula is as follows:

	Per cent
Resins	41 to 99
Waxes	1 to 59
Hydrocarbons	1 to 59

By resins, we mean natural substances such as gum thus, copal, dammar, kauri, mastic and other similar substances; and synthetic substances such as ester gum, chlorinated aromatic hydrocarbons such as chlorinated biphenyl, polymerized turpenes, phenol-formaldehyde resins modified by fatty acids and mixed with rosin and rosin derivatives such as ester gum, the glyceride of abietic acid such as the Amberols, the Albertols, Bakesite, Paranol, which are trade names of substances described in German Patents 254,111; 269,659; 281,939; 289,968, and 438,371, and resinous and waxy metallic substances such as the metallic derivatives of organic acids such as abietic, stearic and the like.

By waxes, we mean natural waxes such as Japan wax, beeswax, ceresin, and synthetic waxes such as Rilan wax, and waxy substances such as stearyl alcohol, stearic acid and similar substances. These waxes are soft with relation to carnauba wax and provide a pliable coating.

By hydrocarbons, we mean substances such as petrolatum, and the like.

The general formula and the usual limits of the ingredients used therein have been stated. A specific example of a formula containing the necessary ingredients in the desired amounts would be as follows:

Container coating:	Per cent
Ester gum	65
Japan wax	11
Petrolatum	24

Japan wax and petrolatum are natural products, and need no definition. Ester gum is the glyceryl ester of abietic acid.

The specific formula given is merely an example of one formula which could be used, and is not given as the only mixture which would make a proper coating, as is believed clear from the general formula and the citation of numerous resins, waxes and hydrocarbons which are illustrative of materials which could be used for the purpose.

In accordance with the patent statutes, we have described the principles of our composition for coating containers, and while we have endeavored to set forth the best embodiment thereof, we desire to have it understood that the formula may be changed within the scope of the following claims without departing from the spirit of the invention.

We claim:

1. In combination with a base, a coating com-

prising substantially ester gum 65%, Japan wax 11%, and petrolatum 24%.

2. In combination a base and a coating therefor, said coating comprising substantially ester gum 65%, wax 11%, and petrolatum 24%.

3. In combination with a base a coating therefor, comprising substantially ester gum 65%, ceresin 11%, and petrolatum 24%.

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