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COATING FOR FASTENINGS

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This invention relates to metal fastenings and, particularly, to an improved coating for such fastenings.

It is both customary and desirable to coat metal fastenings, such as nails, staples, tacks, screws, etc., which depend upon frictional engagement with the wood or with the material with which they are used, for their holding power. Various kinds of coatings, especially cement coatings, have been suggested and commerically used. Some of these coatings have been successful in their use while others have failed to adhere to the surface of the fastenings and were stripped off while being driven, or would come off onto the hammer head. The coating of the present invention will adhere firmly to the fastening at all times and under any conditions and is water and moisture proof, thus protecting the surface of the same against rust and corrosion.

Also, fastenings as heretofore coated sometimes became gummy or sticky, especially when stored in a warm or damp place, thus tending to stick together in the shipping packages, which is, of course, very undesirable. Nailing machines are often used to drive wire nails and such coatings, when sticky, would not feed easily and would, therefore, tend to jam the chutes.

The improved coating of our invention will not become sticky or gummy under any condition and, at the same time, it will present a clean, clear smooth transparent surface which gives the appearance of not being coated, and yet produces a fastening having a greatly increased holding power.

According to the present invention, the coating is a resin made from a nitro-cellulose material, commonly known as Celluloid or pyroxylin, and preferably combined with some other suitable gum resins. These gum resins act as plasticizers and microscopic bonding agents between the fastener and wood or material into which the same is driven or placed. This resin mixture can be made temporarily, if desired, into a thick jelly-like mass of the desired consistency and later, when used, dissolved by means of a suitable solvent to the consistency desired for application to the fastenings. Equal parts of acetone and denatured alcohol in solution, or equal parts of amyl acetate and acetone in solution, are the solvents preferable for use. The latter solvent may have advantages as to ease of application of the coating and to its thinness, but it would be slightly more expensive, due to the increased cost of amyl acetate and acetone over denatured alcohol.

Any solvent used should be, of course, of a very high volatile nature as the fastenings are not necessarily baked but dried with the aid of hot air, and an ordinary tumbling, dipping and spraying apparatus can be used to apply the coating. It will be further understood that it is desirable to use a solvent, as described, which is non-toxic as sometimes the users of such fastenings carry them in the mouth. Also, if desired, suitable transparent dyes or mineral pigments could be added to the coating to produce transparent, translucent or opaque colored fastenings which are at times desirable.

While we have, in this application, specifically described an embodiment which our invention may assume in practice, it will be understood that this embodiment is merely for the purpose of illustration and description, and that various other forms may be devised within the scope of the invention, as defined in the appended claims.

We claim:

1. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a nitro-cellulose base, said coating adapted to firmly adhere to the surface of said fastening to increase the coefficient of friction between said fastening and the material with which it is used.

2. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a pyroxylin base dissolved in a solvent, said coating adapted to firmly adhere to the surface of said fastening to increase the coefficient of friction between said fastening and the wood.

3. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a pyroxylin base dissolved in a solution of acetone and denatured alcohol, said coating adapted to firmly adhere to the surface of said fastening to increase the coefficient of friction between said fastening and the wood.

4. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a pyroxylin base dissolved in a solution of amyl acetate and acetone, said coating adapted to firmly adhere to the sur-

face of said fastening to increase the coefficient of friction between said fastening and the wood.

5. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a pyroxylin base dissolved in a solution of equal parts of acetone and denatured alcohol, said coating adapted to firmly adhere to the surface of said fastening to increase the coefficient of friction between said fastening and the wood.

6. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a pyroxylin base dissolved in a solution of equal parts of amyl acetate and acetone, said coating adapted to firmly adhere to the surface of said fastening to increase the coefficient of friction between said fastening and the wood.

7. As a new article of manufacture, a wire nail having a coating consisting of a resinous material having a pyroxylin base dissolved in a solvent, said coating adapted to adhere to the surface of said nail to increase the coefficient of friction between said nail and wood.

8. As a new article of manufacture, a wire nail having a coating consisting of a resinous material having a pyroxylin base dissolved in a solution of equal parts of acetone and another solvent, said coating adapted to adhere to the surface of said nail to increase the coefficient of friction between said nail and wood.

9. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a nitro-cellulose base and a coloring agent dissolved in a suitable solvent, said coating adapted to adhere to the surface of said fastening to increase the coefficient of friction between said fastening and the material with which it is used and to color the surface of said fastening.

10. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a nitro-cellulose base, said coating being corrosive resistant and plasticized so as to not chip nor easily be removed from the metal surface of the fastening and adhering firmly and tenaciously thereto, and having a high coefficient of friction with the material with which the fastening is to be used.

11. As a new article of manufacture, a metal fastening for frictional insertion in wood and characterized by having a coating consisting of a resinous material having a nitro-cellulose base combined with a gum resin which acts as a plasticizer so that the coating will be spread uniformly on the surface of the fastening and will not chip nor easily be removed therefrom, said coating adhering firmly and tenaciously to the metal surface of the fastening, and having a high coefficient of friction with the material with which the fastening is to be used.

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