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COATED NAIL

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1 Claim. (Cl. 117—132)

1

This invention relates to coated nails of the type having coatings for the purpose of enhancing their frictional resistance to withdrawal after being hammered into wood.

According to the present invention, a coating material is made up consisting by weight of 70 parts "fine melt" Congo resin, 30 parts run gilsonite, from 2 to 20 parts of a plasticizer, 20 parts xylol and 120 parts V. M. & P. naphtha.

Upon mixing the constituents, the resultant liquid may be used to coat nails in the same fashion as nails have been heretofore coated. After drying, during which the xylol and naphtha evaporate, the resultant product is nails having coatings consisting by weight of 70 parts "fine melt" Congo resin, 30 parts run gilsonite and from 2 to 20 parts of a plasticizer.

The coating on these nails will flow under impact, such as when a blow is applied on the head of the coated nail, thus enabling the coating to cement the nail in its socket in the wood or other material into which it is driven. The coating has sufficient adhesion and elasticity so that it is not readily knocked off during handling and shipping. After the coating operation the coating air dries rapidly which insures against the nails forming masses in the kegs. The coating has an attractive appearance and furnishes considerable protection against rusting. The coating is not injurious to health if the nails are held in the mouth. The resistance to pulling out driven coated nails is very high for this coating, being 200% or more above the average of bare nails. If the coated nails are given the "rattle test," wherein the nails are rattled about to simulate shipping conditions, the nails will thereafter have almost as high a pull resistance as do the coated nails that have not been given the test. In addition to all this,

2

all of the constituents of the coating are at present available.

In making up the liquid mixture, the Congo resin and gilsonite are put into solution either by cold cutting or by heating to about 250° F. in the presence of the xylol, and after the latter is taken up, the described naphtha is worked in. After the resins are all in solution the plasticizer is stirred in. If the Congo resin is carried to a slack melt, if the gilsonite is run much beyond the point where it becomes soluble, or if the Congo and gilsonite resins are melted together before adding the solvent, the resultant coating is too brittle. The placticizer used may be either a semi-drying or slow drying oil such as soya bean oil or refined fish oil.

I claim:

A metal fastening of the type that is hammered into wood and frictionally retained therein, having a coating consisting by weight of about 70 parts "fine melt" Congo resin, 30 parts run gilsonite and from 2 to 20 parts plasticizer.

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