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UNITED STATES PATENT OFFICE.

EDGAR FORD MORRIS, OF MANCHESTER, ENGLAND, ASSIGNOR OF ONE-HALF TO JAMES ANDERSON MORRICE, OF GLASGOW, SCOTLAND.

COATING FOR THE PREVENTION OF RUST OR THE LIKE.

No Drawing. Application filed October 7, 1924. Serial No. 742,267.

To all whom it may concern:

Be it known that I, EDGAR FORD MORRIS, a subject of the King of Great Britain, residing at Manchester, in the county of Lancaster, England, have invented new and useful Improvements in Coatings for the Prevention of Rust or the like, of which the following is a specification.

The invention relates to improvements in or relating to the prevention of rust or the like and has for its object to provide a method or process whereby iron or other ferrous metal which need not be thoroughly cleaned may be more effectively protected from the action of rust.

In carrying my invention into effect I first coat or cover the material with an aqueous emulsion prepared from a paint containing zinc yellow (basic chromate of zinc) that is to say, for example a paint composed of the following ingredients mixed or combined in or about the proportions stated viz:—20% zinc yellow, 5% Prussian blue, 75% fillers such as the finest barytes ground into a suitable paint vehicle such as linseed oil, and to this is added glue or gum dissolved in water to which mixture I may add the usual volatile thinners. The preparation of the above coating or emulsion consisting of zinc yellow paint plus water plus glue or other emulsification agent with permissible addition of volatile thinners e. g. turpentine or white spirit, may be varied in any convenient manner, and after the emulsion has been allowed to dry on the metal a contact is secured with the metal even if it should be, to a certain extent, damp or not quite clean. I then apply a second coating consisting of any suitable paint, preferably containing zinc yellow, such as one consisting of 20% zinc yellow, 5% Prussian blue, 75% fillers such as the finest barytes ground into a suitable paint vehicle such as linseed oil.

I have discovered that by treating the ferrous metal in the manner above described when employing the known inhibitent of rusting, zinc yellow, iron or other ferrous metal may be protected even if it is rusted before treatment.

By the means hereinbefore described ferrous metal may be protected from rust and the paint caused to adhere thereto more efficiently than heretofore.

What I claim as my invention and desire to secure by Letters Patent is:—

1. The process for preventing the formation of rust on iron or other ferrous metals which consists in first coating the metal with an aqueous emulsion prepared from a paint containing zinc yellow (basic chromate of zinc) to which has been added an emulsifying agent dissolved in water and a volatile thinner and allowing said coating to dry and then applying a second coating consisting of a paint containing zinc yellow.

2. In the process claimed in claim 1 the use of an oil paint adapted to be applied to the metal after the aqueous solution has dried consisting of 20% zinc yellow, 5% Prussian blue, and 75% fillers ground into a vehicle such as linseed oil.

In testimony whereof I have signed my name to this specification.

EDGAR FORD MORRIS.