

UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF LLEWELLYN PARK, WEST ORANGE, NEW JERSEY.

PROTECTIVE COATING FOR STEEL AND IRON.

1,410,391.

Specification of Letters Patent. Patented Mar. 21, 1922.

No Drawing.

Application filed December 2, 1919. Serial No. 342,009.

To all whom it may concern:

Be it known that I, THOMAS A. EDISON, a citizen of the United States, and a resident of Llewellyn Park, West Orange, Essex County, New Jersey, have invented certain new and useful Improvements in Protective Coatings for Steel and Iron, of which the following is a description.

My invention relates to protective coatings for steel and iron and the principal object thereof is to provide an improved coating of this character which when applied to polished steel or iron will effectually prevent rusting thereof.

My invention is based on the discovery that flour of zinc, commonly known as zinc dust, when properly combined with a suitable carrier and applied to polished iron or steel will when such iron or steel is subjected to moisture, rain, salt water spray, etc., effectually prevent rust forming thereon as long as an appreciable number of the particles of zinc dust contact the iron or steel.

Where a readily removable coating is desired, I preferably employ therefor a mixture of zinc dust and petrolatum or a similar unctuous substance, the mixture being formed of such consistency as to enable it to be readily smeared over the surface of the polished iron or steel which it is desired to protect. This smear or coating is readily removable from iron or steel by wiping.

For conditions of use where it is not necessary or desirable to render the protective coating readily removable, the same preferably consists of a drying-oil paint, that is, a paint containing linseed or other drying oil, in which zinc dust is substituted for the usual lead white, zinc white or other similar ingredient. This paint, as is the case with the ordinary drying-oil paints, can be thinned down by the addition of turpentine so as to render it capable of being readily applied by brushing to the surface which it is desired to protect.

It is to be understood that my invention is not limited to the use of the specific carriers for the zinc dust described herein, but that many other carriers may be employed without departure from the spirit of my invention and the scope of the appended claims.

Having now fully described my invention, what I claim as new and desire to protect by Letters Patent, is as follows:

1. An easily removable protective coating for steel and iron comprising a material consisting only of an unctuous material and zinc dust, substantially as described.

2. A protective coating for steel and iron comprising a mixture of petrolatum and zinc dust, substantially as described.

This specification signed and witnessed this 28th day of November, 1919.

THOS. A. EDISON.