

UNITED STATES PATENT OFFICE.

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TO LOUIS H. BARKER, OF JERSEY CITY, NEW JERSEY.

METHOD OF PROTECTING METALS.

SPECIFICATION forming part of Letters Patent No. 756,934, dated April 12, 1904.

Application filed February 2, 1903. Serial No. 141,500. (No specimens.)

To all whom it may concern:

Be it known that I, PETER J. BURNS, a citizen of the United States, residing at 250 Pine street, Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Methods of Protecting Metals, of which the following is a specification.

It is well known that metal-work, and particularly iron and steel structures, corrodes very rapidly when exposed to salt air at the sea-shore or to sulfurous and other gases from furnaces or chemical-works. Heretofore various kinds of paint have been applied to such exposed structures, and so far as I am aware the best paints gave but a few months of protection. In railway-train sheds and engine-houses, for instance, the gases attack the iron through the paint within a few weeks or months after its application, and such structures require frequent scraping and repainting.

It is the object of my invention to provide a coating for iron structures which is much more permanent than paint alone; and to this end the invention consists in a method of applying such a coating.

In carrying out my invention I first apply to the iron or steel a coat of paint, preferably of some sticky or adhesive nature. While this paint is still moist and sticky, I apply to it a layer of paper in such manner that the paper conforms to the surface of the iron-work, just as wall-paper conforms to the surface upon which it is pasted. I then coat the outer surface of this paper with ordinary paint of good quality.

The first or inner coat of paint may be composed of materials ordinarily used for coating metal, and it preferably should be of a slow-drying character. I preferably use a paper which is non-porous or substantially impervious to air, such as paper coated or treated with oil or paraffin or similar material. In practice I have found paraffin-paper to work very satisfactorily.

One of the advantages of my invention is that both coats of paint may be applied practically at the same time, the layer or stratum of paper forming a base or support for the

second coat. It has heretofore been necessary to permit the first coat to dry before applying the second coat, thus entailing the supplying of scaffolding or movement of the same over the entire structure for each coat. In painting train-sheds or other large structures the cost of the scaffolding and moving the same is a large item of expense in connection with painting.

The permanency of my improved coating makes it very much cheaper than ordinary paint. Thus in a test of durability covering a few months a number of good paints were found to have become porous and worthless, while a coating applied according to my process which was similarly exposed was found to be practically unchanged.

The paper covering and the outer coat of paint being applied while the inner coat is still moist prevents the inner coat from drying out and becoming porous, and this prevents the salts or acids in the atmosphere or water and gases from furnaces, &c., from coming in contact with the iron.

Having described my invention, what I claim, and desire to protect by Letters Patent, is—

1. The method of coating exposed metal-work which consists, first, in covering the surface of the metal with a coating of suitable paint; secondly, in applying to said coat of paint while moist and sticky a layer of paper, and, thirdly, in applying a second coat of paint to said paper while the inner coat of paint is still moist.

2. The method of coating exposed metal-work which consists, first, in applying a coat of suitable paint; secondly, in applying to said paint a layer of paper or equivalent material substantially impervious to air, and, thirdly, in applying an outer coat of paint to said paper or material while the inner coat of paint is still moist.

In testimony whereof I affix my signature in presence of two witnesses.

PETER J. BURNS.

Witnesses:

S. H. COOPER,
LOUIS H. BARKER.