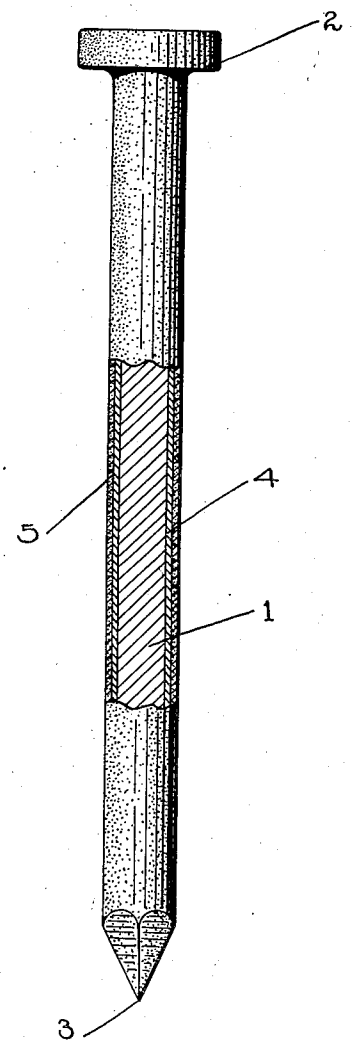
Nov. 3, 1931. G. N. WILLIAMS 1,829,974

ARTICLE OF MANUFACTURE

Filed Aug. 11, 1930



INVENTOR
George N. Williams
BY
La Port & La Port
ATTYS

Patented Nov. 3, 1931 1,829,974

UNITED STATES PATENT OFFICE

GEORGE N. WILLIAMS, OF KOKOMO, INDIANA, ASSIGNOR TO CONTINENTAL STEEL CORPORATION, OF KOKOMO, INDIANA, A CORPORATION OF INDIANA

ARTICLE OF MANUFACTURE

Application filed August 11, 1930. Serial No. 474,618.

This invention has reference to an iron or steel article which has a protective coating preferably of zinc spelter and such coating "cement-coated".

The invention, furthermore, relates to an article of manufacture as, for example, a nail or the like, provided with an exterior coating of a material, preferably non-metallic, which has a low melting point, as, for example, "cement-coating", a substance or composition which is sensitive to heat and which will become softened by the heat of friction occasioned by driving the nail, only to become set again when the nail has been driven home, when the "cement-coating" adheres not only to the nail but also to the surrounding fiber of the material into which the nail has been driven, and holds the nail practically cemented in place; and having a metallic protective coating between the body of the nail and said exterior coating.

"Cement-coating" as herein used is well known to those skilled in the art as relating to a substance or composition including a gummy-like constituent, such as gum or resin.

I am aware that to coat nails and like articles with zinc spelter, per se, is not new and I am also aware that to coat nails and like articles with a "cement-coating", per se, is not new, but I am not aware that a nail which has an adherent protective coating of zinc spelter and such coating covered with a "cement-coating" has ever been made or used. In this instance, I combine the qualities of a protective coating on the iron or steel article with an exterior coating of a substance or composition which tends to set or cement the article in place; the zinc spelter protecting the article against corrosion and the "cement-coating" functioning to set the article. I have found that merely "cement-coating" an article, as for example a nail, does not offer that degree of protection against corrosion as is offered by zinc spelter due to the fact that when the nail is driven and the "cement-coating" is softened, there is a tendency to expose surface portions of the nail for the collection of dampness and moisture which will tend to corrode and destroy the nail; however, by first applying a zinc spelter coating to the nail and then surfacing such coating with a "cement-coating", I obtain, first, an article which is fully protected against corrosion and which has a surface quality enabling the "cementing" of the nail when driven into place, and I, furthermore, find that the "cement-coating" has a better and more effective adhesion of the zinc spelter than it does to the iron or steel article itself.

That the invention may be more fully understood, reference is had to the accompanying drawing illustrating a preferred embodiment of the invention, in which:

The figure shows an elevation of a nail partly broken away to disclose the zinc spelter coating on the body of the nail and such coating covered with "cement-coating".

In the drawing the nail is shown having the shank 1 and provided with the usual head 2 and the driving point 3. The surface of the complete nail is shown coated preferably with a zinc spelter coating 4 applied in any preferred or usual manner and such zinc spelter coating covered or coated with a "cement-coating" 5.

As pointed out, the zinc spelter is a coating which will protect the body of the nail or similar article against corrosion and rust attack and said zinc spelter covered or coated with a "cement-coating" which has properties sensitive to heat so that when applied to a nail and the nail driven, the "cement-coating" becomes softened by the heat of friction occasioned by driving the nail, only to become set again when the nail has been driven home; furthermore, as pointed out, the "cement-coating" has a better adherence or bonding action when applied to the zinc spelter coating than when applied to the iron or steel body and if and in the event, due to the action of heat resulting from friction the "cement-coating" opens or spreads sufficient to allow moisture to attack the article itself, such is prevented by the zinc spelter covering the article and interposed between the article and the "cement-coating."

What I claim is:

As a new article of manufacture, a nail having a zinc spelter coating extending throughout substantially its entire surface

and a cement coating including a gummy-like constituent completely enveloping the first named coating and having an affinity therefor, and further having a lower melting point so as to be softened by the heat resultant from friction upon driving the nail into position so as to effect adherence of the cement coating to the material into which the nail is driven.

In witness whereof, I have hereunto set my hand this 8th day of August, 1930.

GEORGE N. WILLIAMS.