

UNITED STATES PATENT OFFICE.

ISAAC KENNEDY, OF ELMIRA, NEW YORK.

PROCESS OF COATING WITH METAL.

SPECIFICATION forming part of Letters Patent No. 470,492, dated March 8, 1892.

Application filed June 16, 1891. Serial No. 396,488. (No specimens)

To all whom it may concern:

Be it known that I, ISAAC KENNEDY, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements in Iron-Finish; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a coating for iron similar to the coating on a Russia-iron stove-pipe in appearance, only it can be applied to iron of any size and thickness.

There are three coatings put on in the process of applying the iron-finish, and each coating is composed and applied as follows:

First coat.—I prepare a liquid from tobacco by soaking it in an extract of hops, such as beer or lager. Then I mix any pulverized or comminuted metal or metals in the liquid in the proportion of about three grains of the metal to an ounce of tobacco-liquid, making it about the consistency of oil-paint. The metals used are such as lead, copper, silver, iron, or any other suitable mineral, which one and all are varied in amount, according to the price and quality of the finish. This liquid may be applied to the iron by brush, or the iron may be dipped, after which it is subjected to an intense heat.

Second coat.—Rochelle salts, hydrate of chloral, salicylic acid, quinine, and morphine are either one or all mixed with the tobacco-liquid in the proportion of one-half to a grain of the chemicals to one ounce of the liquid, the amount of chemicals to be varied according to the color required. After applying this coat to the iron the same is subjected to a light heat for drying.

Third and finishing coat.—Apply a light coat of vegetable oil, such as oil of cloves or any of the vegetable oils. Now on an extra iron plate place Rochelle salts and sulphur in equal proportions dampened with the tobacco-

liquid, so as to make it about the consistency of paint. Then place the sheet of iron to be finished, after having applied the oil, upon or above the extra sheet or plate and apply heat to the latter, when the vapor arising from the mixture thereon will tend to cut the ingredients in the coating. This third coat is used only when the second coat is unsatisfactory.

When I apply the coating to the iron, the latter is placed between two plates before it is heated. This prevents the iron from burning up and confines the materials to the iron that is to be finished.

What I claim as new, and desire to secure by Letters Patent, is—

1. A coating employed in finishing iron, consisting of tobacco-juice mixed with a pulverized metal, as specified.

2. The process of coating iron, consisting in applying a mixture of tobacco-juice and a metal and then subjecting the coated iron to heat, as set forth.

3. The herein-described coating for iron, composed of morphine, quinine, salicylic acid, hydrate of chloral, and Rochelle salts mixed in suitable proportions with a liquid composed of tobacco-juice and a metal, as and for the purpose described.

4. The process of coating iron to produce a non-corrosive finish, consisting in first applying a mixture of tobacco-juice and a pulverized metal; second, applying a liquid of Rochelle salts, hydrate of chloral, salicylic acid, quinine, and morphine, one or all mixed in suitable proportions with the tobacco-liquid, and then and lastly applying a vegetable oil, such as oil of cloves, the iron being subjected to heat after each of said coatings have been applied, as described.

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

ISAAC KENNEDY.

Witnesses:

E. J. BALDWIN,

FRANCIS E. BALDWIN.