

# UNITED STATES PATENT OFFICE.

AMBROSE RIDD, OF NEWPORT, KENTUCKY.

## METHOD OF POLISHING METAL SURFACES.

988,664.

Specification of Letters Patent.

Patented Apr. 4, 1911.

No Drawing.

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*To all whom it may concern:*

Be it known that I, AMBROSE RIDD, a citizen of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have invented a new and useful Method of Polishing Metal Surfaces, of which the following is a specification.

This invention has reference to improvements in polishes for metal surfaces and in the method of applying such polishes, and its object is to produce a high luster on metal surfaces, which luster shall be durable, being resistant both to wear and heat.

The polish is applicable to various metal surfaces, especially sheet metal surfaces and to stoves and furnaces and also to stove pipes where the polish is subjected to the action of heat while the polish is highly resistant to ordinary wear.

The improved polish is composed of boiled linseed oil, five parts, varnish one part, and pulverized graphite in sufficient quantity to make a compound of the consistency of thick paste. It will be understood however that the proportion given in the above example need not be strictly adhered to but may be somewhat varied without material harm to the result obtained. The varnish employed should be a varnish of good grade. A copal varnish will answer.

In preparing the polish the oil is first brought to the boiling point and then the varnish is added while the oil is being stirred, and the stirring is continued until the ingredients are thoroughly mixed. Then while the mixture is still at the boiling point pulverized graphite is added until the compound is of a consistency about that of thick paint, the stirring being continued until the mixture is complete. The boiling may be omitted, but the result is not so good.

The surface to be treated should be thoroughly cleaned of rust and should be free from pit marks or any such kindred imperfections.

The compound is applied to the surface to be treated by means of a soft cloth dipped into the compound and then applied to the surface on which the compound should be rubbed carefully and uniformly. Then another cloth is slightly charged with raw linseed oil, or with other oils, though linseed

oil is the best, and with this cloth all surplus of the application to the surface to be treated is removed and the wiping is continued until there is left a smooth but slightly sticky surface. Now with a soft dry cloth dipped into dry pulverized graphite, graphite is applied to the sticky surface until it has been covered uniformly, after which the surface may be rubbed to a high polish with little effort.

After the application of the powder and the polishing of the same the article is baked at a temperature of from three hundred degrees to six hundred degrees Fahrenheit. This serves to make the coating hard and durable.

If it be desirable to obtain a greater luster, a second coating may be applied after the first coating has been baked.

What is claimed is:—

1. The method of polishing metal surfaces, which consists in first producing an adhesive oily layer containing graphite upon the surface, then applying dry graphite thereto, and then polishing the graphite.

2. The method of coating metal surfaces which consists in first producing a thin adhesive drying oily layer upon the surface, then removing the greater part of the layer by a suitable solvent, then applying dry graphite to the oily layer, then polishing the graphite, and finally baking the coating.

3. The method of coating metal surfaces which consists in first producing an adhesive drying oily layer containing graphite upon the surface, then applying dry graphite thereto, then polishing the graphite, and finally baking the coating.

4. The method of coating metal surfaces which consists in first producing a drying oily layer containing graphite upon the surface, then removing the surplus, then applying dry graphite to the oily layer, then polishing the graphite, and finally baking the coating.

5. The method of coating metal surfaces, which consists in first producing upon the surface a layer containing boiled linseed oil, varnish and graphite, then removing the surplus from the surface, then applying graphite thereto, then polishing the graphite, and finally baking the coating.

6. The method of polishing metal surfaces which consists in producing upon the surface to be polished a sticky oily layer containing graphite, then applying powdered graphite, and then polishing the graphite.

7. The method of producing upon metal surfaces a polished coating which consists in forming upon said surface a sticky drying oily layer containing graphite, then apply-

ing dry graphite thereto, then polishing the graphite, and finally baking said coating.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

AMBROSE RIDD.

Witnesses:

JNO. C. DE MOSS,

JOHN MOSPENS.