UNITED STATES PATENT OFFICE.

AGNES DALBY, OF LONDON, ENGLAND.

PREPARATION FOR SILVERING OR GILDING METAL ARTICLES.

1,208,507. Specification of Letters Patent. Patented Dec. 12, 1916.

No Drawing. Application filed July 22, 1916. Serial No. 110,708.

To all whom it may concern:

Be it known that I, AGNES DALBY, a subject of the King of Great Britain, residing at 17 Kensington Mansions, Trebovir Road, Earl's Court, London, England, have invented certain new and useful Improvements in Preparations for Silvering or Gilding Metal Articles, of which the following is a specification.

This invention relates to the plating or coating of metals the chief object being to provide a new or improved preparation in paste or liquid form for applying to metals such as iron, steel, brass, copper and aluminium for the purpose of silver plating or gilding such metals in a much simpler manner and at much less cost than by electro-plating or electro-gilding.

According to this invention the improved preparation contains potassium iodid, hydropotassium tartrate (cream of tartar) potassium cyanid and a suitable silver compound when the preparation is for silver plating or a gold compound when the preparation is for gilding. An appropriate substance or water is added according as to whether the preparation is required in liquid or paste form.

For silver plating the following formula has been found to give satisfactory results, as a liquid preparation:—

Potassium iodid ..... }
Hydropotassium tartrate (cream of tartar)..... }
Potassium cyanid ..... } in equal parts.
Double cyanid of potassium and silver ($KAg(CN)_2$) ..... }

Distilled water, one pint to 8 ozs. of a mixture of the above substances.

For gilding the following formula has been found to give satisfactory results as a liquid preparation:

Potassium iodid ..... }
Hydropotassium tartrate (cream of tartar)..... } in equal parts.
Potassium cyanid ..... }
Chlorid of gold..... }

Distilled water, one pint to 8 ozs. of a mixture of the above substances.

If either of the above preparations is required in paste form the distilled water is substituted by 4 ozs. of gritless "whiting" (calcium carbonate) and a few grains of calcium chlorid is added to keep the preparation moist.

In applying the preparation, the article to be plated or gilded is thoroughly cleaned and freed from grease, and the plating or gilding liquid or paste is then gently applied to or rubbed on the article with a piece of soft and clean material such as flannel until the desired result is obtained.

The improved preparation if made weaker than the example suggested above can be used as a cleansing composition or wash in the one case for silver and silver plated articles, and in the other case for gilded and gold articles.

What I claim and desire to secure by Letters Patent of the United States is:—

1. A preparation for plating or coating metals, which contain potassium iodid, hydropotassium tartrate, potassium cyanid and a noble metal compound.

2. A preparation for plating or coating metals, which contains potassium iodid, hydropotassium tartrate, potassium cyanid and double cyanid of potassium and silver.

3. A liquid preparation for plating or coating metals which contains equal quantities of potassium iodid, hydropotassium tartrate, potassium cyanid, a noble metal compound and distilled water in the proportion of one pint to eight ounces of a mixture of the aforesaid substances.

4. A preparation for plating or coating metals, which contains equal quantities of potassium iodid, hydropotassium tartrate, potassium cyanid, a noble metal compound and moisture.

AGNES DALBY.