

UNITED STATES PATENT OFFICE.

GASTON JACQUIER, OF BELGRAVIA, NEAR JOHANNESBURG, TRANSVAAL.

ANTICORROSIVE ALLOY OR METALLIC COMPOUND.

1,019,963.

Specification of Letters Patent.

Patented Mar. 12, 1912.

No Drawing.

Application filed October 24, 1910. Serial No. 588,697.

To all whom it may concern:

Be it known that I, GASTON JACQUIER, a citizen of the Republic of France, and a resident of Belgravia, near Johannesburg, Transvaal, have invented certain new and useful Improvements in Anticorrosive Alloys or Metallic Compounds, of which the following is a specification.

This invention relates to a new or improved alloy or metallic compound which is capable of resisting the corrosive action of sulfuric acid, cyanid solution, &c.

The alloy can be used for the manufacture of pipes, tanks, taps, valves, screens, cables, ropes, skeps, cages and similar vehicles, pumps and other machinery or appliances used in mining or other industries which it is desirable to protect from the corrosive action of liquids with which they come in contact. The articles which it is desired to render acid resistant can be made entirely of my improved alloy, or can be suitably coated or lined either internally or externally or both with the alloy.

My improved alloy or metallic compound is composed of aluminium, bismuth, copper and silicon or magnesium which are used in the following proportions, more or less:—aluminium 92 per cent., bismuth 2 per cent., copper 5 per cent., silicon 1 per cent., or

aluminium 91 per cent., bismuth 2 per cent., copper 5 per cent., magnesium 2 per cent.

In manufacturing the alloy the bismuth, copper and silicon or magnesium are placed in a crucible and melted together, and to the resultant alloy, while still molten, is added the aluminium, which has previously been melted.

By suitably varying the proportions of the ingredients the degree of hardness and other properties of the product can be varied.

What I claim as my invention and desire to protect by Letters Patent is:—

1. An anti-corrosive alloy or metallic compound consisting of aluminium, bismuth, copper and silicon, as set forth.

2. An anti-corrosive alloy or metallic compound consisting of approximately ninety-two per cent. of aluminium, two per cent. of bismuth, five per cent. of copper, and one per cent. of silicon, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GASTON JACQUIER.

Witnesses:

CHAS. OVENDALE,
MAUD POPE.