

UNITED STATES PATENT OFFICE

MILTON H. CAMPBELL, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN ALLOYS TO RESEMBLE SILVER.

Specification forming part of Letters Patent No. **153,154**, dated July 21, 1874; application filed June 11, 1874.

To all whom it may concern:

Be it known that I, MILTON H. CAMPBELL, of Syracuse, Onondaga county, New York, have invented a certain Compound Metal or Alloy, which I call "Artificial Silver," of which the following is a specification:

My purpose in this invention is to produce an alloy resembling in its essential features silver, that is strong and as easily wrought as that metal by casting, hammering, spinning, &c.

To produce this article, I first make an alloy of twenty-five pounds of tin, ten pounds of antimony, and four of bismuth, melted together in the usual way, and when cooled cut into fragments, for alloy. I next put fifty pounds of tin and eleven pounds of nickel into a crucible, and bring up the heat sufficiently to melt the nickel and mix it with the tin. I then add forty pounds of the alloy first named, together with a half pound of cadmium. I

then cover the surface of the melted metals with a flux composed of one part carbonate of potash, four parts muriate of ammonia, and five parts powdered charcoal, by weight. The heat is then continued five or ten minutes longer, and the metal is poured.

It is obvious that copper or other metals might be added to this alloy, but I do not deem it desirable. They neither beautify nor cheapen the metal, and for many purposes deteriorate it.

In the above-described alloy, I claim—

The compound, herein described, of tin, bismuth, antimony, and nickel, compounded in the manner and in the proportions substantially as and for the purposes set forth.

M. H. CAMPBELL.

Witnesses:

J. J. GREENOUGH,
P. R. McLENNAN.