

UNITED STATES PATENT OFFICE.

ORLANDO M. THOWLESS, OF NEWARK, NEW JERSEY.

ALLOY.

SPECIFICATION forming part of Letters Patent No. 338,317, dated March 23, 1886.

Application filed November 27, 1885. Serial No. 184,075. (Specimens.)

To all whom it may concern:

Be it known that I, ORLANDO M. THOWLESS, a subject of the Queen of Great Britain, residing at Newark, in the county of Essex and State of New Jersey, have invented a new and useful Alloy, of which the following is a specification.

The object of my invention is to produce an alloy having the appearance and general characteristics of silver, to be used in the place of silver in the construction of articles of table-ware, watch-cases, and for other like purposes. To attain this object I take the ordinary German silver of commerce, which is composed of nickel, zinc, and copper in somewhat varying proportions. I prefer, however, in practice, to use the following proportions: nickel, eighteen parts; zinc, eighteen parts, and copper sixty-four parts. These ingredients are mixed together with a suitable flux and melted in a crucible. When fusion has taken place, pure silver is added in the proportion of seven parts of such silver to ten parts of the alloy.

Instead of adding the silver directly to the alloy, such alloy may be run off into pigs

and the fusion with the silver subsequently effected.

The proportion of the ingredients in the German-silver alloy may be varied somewhat without materially changing the character of the same, and the proportions of pure silver and the alloy may be varied also to suit particular circumstances. For castings a smaller percentage of silver will answer, while for sheet-metal goods the proportion of pure silver may be increased.

I am aware that alloys of copper, nickel, zinc, and silver are old, and such I do not claim, broadly; but

What I do claim is—

A compound alloy composed of the following ingredients, in about the proportions named, to wit: nickel, eighteen parts; zinc, eighteen parts, and copper sixty-four parts, fused together into an alloy, and pure silver seventy parts, substantially as specified.

ORLANDO M. THOWLESS.

Witnesses:

D. J. LEWIS,
ALBERT SPIES.