

UNITED STATES PATENT OFFICE.

CHARLES H. BIRMINGHAM, OF BALTIMORE, MARYLAND.

ALLOY.

No. 824,618.

Specification of Letters Patent.

Patented June 26, 1906.

Application filed March 13, 1906. Serial No. 305,826.

To all whom it may concern:

Be it known that I, CHARLES H. BIRMINGHAM, of Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Alloys; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 The object of this invention is to provide an alloy which will be fusible only at a very high temperature and one which may be used as a substitute for platinum, especially as employed in connection with electrical ap-
15 pliances.

The alloy is composed of the following ingredients in about the proportions specified—to wit, silver, sixteen and one-half ounces; nickel, four and one-fifth pounds; bismuth, 20 one-half ounce, and gold fifty-three pennyweights. These proportions, which are according to Troy measure, may be varied without materially altering the properties of the compound; but I have found those stated
25 to be productive of best results.

An alloy composed of the parts specified may be used wherever platinum is now ordinarily required—for instance, as the leading-in wires for incandescent lamps, contact-points for electric vibrators, and, in fact, in 30 all classes of electrical appliances where high resistance is required. The compound is also highly advantageous in connection with telephone-transmitters, being highly ductive and far more durable than platinum. 35

I claim as my invention—

1. An alloy composed of silver, nickel, bismuth and gold.

2. An alloy composed of silver sixteen and one-half ounces, nickel four and one-fifth 40 pounds, bismuth one-half ounce, and gold fifty-three pennyweights.

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

CHARLES H. BIRMINGHAM.

Witnesses:

FRANCIS S. MAGUIRE,
VERNON E. WEST.