

UNITED STATES PATENT OFFICE.

WILLIAM H. KEMLER, OF ASHLAND, KENTUCKY.

METALLIC ALLOY.

SPECIFICATION forming part of Letters Patent No. 546,780, dated September 24, 1895.

Application filed April 30, 1895. Serial No. 547,626. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM H. KEMLER, of Ashland, in the county of Boyd and State of Kentucky, have invented a new and useful Improvement in Metallic Alloys, of which the following is a full, clear, and exact description.

I have discovered that an excellent alloy for use in the manufacture of antifriction-bearings and for other purposes can be made according to the following formula: zinc, about seventy-nine parts; copper, about eight parts; aluminum, about thirteen parts.

In compounding the alloy I first melt the copper and then add successively the aluminum and the zinc.

The proportions of the metals used may be varied within wide limits; but the zinc should always be in excess of the aluminum and the aluminum in excess of the copper in order to secure the lubricant nature which is characteristic of the alloy.

An increase in the proportion of the copper increases the hardness of the composition.

My improved alloy is strong, very durable, is very fluid when melted, is easily cast, and affords a superior material for bearings of journals, &c.

I claim—

1. An alloy containing zinc, copper and aluminum, the zinc being present in greater proportion than the aluminum, and the aluminum being present in greater proportion than the copper.

2. An alloy containing about seventy-nine parts of zinc, about eight parts of copper, and about thirteen parts of aluminum.

In testimony whereof I have hereunto set my hand.

W. H. KEMLER.

Witnesses:

W. B. CORWIN,
H. M. CORWIN.