UNITED STATES PATENT OFFICE.

MAXIME J. MARCOTTE, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN COMPOSITIONS FOR JOURNALS AND BEARINGS.

Specification forming part of Letters Patent No. 117,652, dated August 1, 1871.

To all whom it may concern:

Be it known that I, MAXIME J. MARCOTTE, of the city and county of St. Louis and State of Missouri, have invented a certain new and useful Compound Metal for Journal-Boxes, of which the following is a specification:

My composition consists of certain metals in about the proportions hereinafter named for the formation of the bearing-surface in journal-boxes, and it is intended to diminish the friction between the shaft and the box to such an extent as to render the application of a liquid lubricant, such as oil, almost or entirely unnecessary.

My composition consists of the following metals mixed in about the proportions named, viz: Tin, sixteen pounds; lead, twelve pounds; copper, eight pounds; zinc, eight pounds; antimony, four pounds; finely-pulverized plumbago, one pound.

The tin, copper, zinc, and antimony are first melted together, and, when they are thoroughly mixed, are run into a mold.

When it is desired to fill the journal-boxes, the

ingot taken from the mold is remelted in an iron pot over a slow fire of charcoal or gas-coke. When the ingot is melted the lead and plumbago are thoroughly stirred in, the lead becoming melted and the plumbago thoroughly mixed, resulting in a pasty mass. The journal-box castings are, before filling, heated to the same temperature as the semi-fluid alloy, with which the chambers in the castings are then filled by means of a trowel or other suitable tool, and the journal-face is shaped by means of a smooth cylinder of hard wood of the same diameter as the journal.

I claim as my invention—

The metallic composition, substantially as described.

In testimony of which invention I have hereunto set my hand.

MAXIME J. MARCOTTE.

Witnesses:

SAML. KNIGHT, HENRY G. ISAACS.