UNITED STATES PATENT OFFICE.

JAMES WILLIAM HALEY, OF MILFORD, MAINE.

LUBRICATING MATERIAL FOR MACHINERY-BEARINGS.

SPECIFICATION forming part of Letters Patent No. 590,369, dated September 21, 1897.

Application filed January 29, 1897. Serial No. 621,227. (No model.)

To all whom it may concern:

Be it known that I, JAMES WILLIAM HALEY, a citizen of the United States, residing at Milford, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Self-Lubricating Material to be Used in Machinery-Bearings of Every Description; 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.

The nature of my invention consists of combining glass, lead, plumbago, and antimony, raising the same to sufficient heat to fuse, and tempering the same as may be required with powdered brass and aluminium.

To prepare the self-lubricating material, take quantities of the following, thoroughly pulverized—that is to say, glass, lead, (preferably red lead,) plumbago, and antimony—in substantially the proportions following, by weight: ten and one-half ounces glass, thirteen and one-half ounces lead, preferably red lead, four ounces plumbago, one-half ounce antimony, and such quantities of borax or other flux as may be necessary in fusing. Thoroughly mix the materials mentioned substantially in the proportions given. The best method of mixing is to sift them together. In case the resulting material requires to be specially hard add powdered brass before sifting, and if it requires to be specially tough add powdered aluminium at the same time in such quantities as may be necessary to temper properly for the purposes for which it is to be used. Then fuse them by heat, being careful not to have the heat sufficient to separate or precipitate the ingredient materials. It may then be pressed into the journal-box, shell, form, or place in which it is proposed to use it and will then form a self-lubricating machinery-bearing and do away with the necessity of lubricants and danger of fire from friction.

What I do claim, and desire to secure by Letters Patent, is—

A compound of glass, lead, plumbago and antimony tempered as may be required with brass and aluminium substantially in the proportions and for the purposes set forth.

JAMES WILLIAM HALEY.

Witnesses:
MATTHEW LAUGHLIN,
WALTER L. PIPER.