

UNITED STATES PATENT OFFICE.

GEORGE H. WINSOR, OF JOHNSTON, RHODE ISLAND.

IMPROVEMENT IN LUBRICATING COMPOUNDS.

Specification forming part of Letters Patent No. **173,840**, dated February 22, 1876; application filed January 29, 1876.

To all whom it may concern :

Be it known that I, GEORGE H. WINSOR, of the town of Johnston, in the county of Providence, in the State of Rhode Island, have invented a new and Improved Compound for Lubricating Purposes, of which the following is a specification :

The compound which I have invented is used for oiling the bearings of machinery, and for all purposes to which lubricating-oils are now applied. Its price does not exceed that of sperm oil, and its use, by reason of the peculiarity of its composition, is attended by far less waste than in the case of other lubricating-oils. It entirely prevents the over-heating of the journals, which is a prolific cause of fires in manufactories.

My compound is composed of the following ingredients, and in substantially the following proportions :

I dissolve six pounds of borax in a quantity of water sufficient for that purpose. I melt together eighteen pounds of tallow and four pounds of bees-wax, stirring them well into each other. When the tallow and bees-wax are thoroughly melted and mixed, I strain them into seventy-two pounds of paraffine oil, and allow the mixture to cool down to a temperature of 80° Fahrenheit. I then pour in the dissolved borax, and stir the compound thoroughly until a perfect union of the ingredients is effected.

This compound can be graded from the lightest to the heaviest grades of lubricating-oils. This is accomplished by slightly changing the proportions of the ingredients. To make a light oil, the quantity of the paraffine oil should be increased. To make it a heavy oil, more tallow and bees-wax must be added. The quantities of the tallow and bees-wax, however, should be in relatively the same ratios to each other as above specified.

The purpose of the bees-wax is to form a smooth surface on the bearing. The tallow serves to increase the volume or to give "body" to the paraffine, and so make the lubricator more durable. The paraffine oil, which is especially the lubricating element of this composition, is, of itself, too light to adhere well to the bearing. The borax, being an alkali, neutralizes the stearine of the tallow, and admits of a perfect union of all the ingredients.

I therefore claim as a novel and useful invention, and desire to secure by Letters Patent—

The lubricating compound, consisting of paraffine oil, tallow, bees-wax, and dissolved borax, combined as described, and in the proportions substantially as specified.

GEORGE H. WINSOR.

Witnesses:

NELSON E. CHURCH,
WARREN R. PERCE.