

UNITED STATES PATENT OFFICE.

CHARLES F. BENEDICT, OF RICHMOND, VIRGINIA.

IMPROVEMENT IN LUBRICATING COMPOUNDS.

Specification forming part of Letters Patent No. **156,530**, dated November 3, 1874; application filed September 18, 1874.

To all whom it may concern:

Be it known that I, CHARLES F. BENEDICT, of Richmond, in the county of Henrico and State of Virginia, have invented a new and Improved Lubricating Compound; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to the preparation of oily or fatty matter, whether animal, vegetable, or mineral, to adapt it to use as a lubricant for car-axle journals, as hereinafter fully described and subsequently claimed.

I take oil of any kind, tallow, or grease, and boil it until the spongy appearance is no longer perceptible; then treat it to a solution of soda and carbonate of lime, boiling until the whole mass thickens up, and adding cold water gradually until saponification takes place. After being allowed to become cold it is ground in any suitable mill. The article now assumes a waxy appearance, and possesses the property of maintaining its consistency up to about 100° Fahrenheit, and of effectually resisting the action of acids or gases, thus never gumming up the journal and journal-box.

I preferably use a mixture of tallow, or other

hard grease, with palm or other oils, or the commercial article known as mare's oil. When the latter, or any other oil that possesses an offensive odor, is employed, I apply flour of sulphur during the process of saponification as a deodorizer.

Having thus described my invention, what I claim as new is—

1. The process of preparing a lubricating-grease for car-axle journals by first boiling oil or fatty matter until it loses its spongy appearance, next boiling the resultant in a solution of soda and carbonate of lime until it saponifies and thickens up, and finally passing it through a grinding-mill, all as set forth.

2. As a new article of manufacture, a lubricating composition consisting of oil, soda, carbonate of lime, and water, saponified to about the consistency of wax, and ground in a suitable mill, as set forth.

CHARLES F. BENEDICT.

Witnesses:

SOLON C. KEMON,
CHAS. A. PETTIT.