

UNITED STATES PATENT OFFICE.

SAMUEL FRAZER, OF GALENA, ILLINOIS.

IMPROVEMENT IN LUBRICANTS.

Specification forming part of Letters Patent No. 219,455, dated September 9, 1879; application filed June 7, 1879.

To all whom it may concern:

Be it known that I, SAMUEL FRAZER, of Galena, in the county of Jo Daviess, and in the State of Illinois, have invented certain new and useful Improvements in Axle - Grease; and do hereby declare that the following is a full, clear, and exact description thereof.

The nature of my invention consists in a composition for axle-grease, as will be herein-after more fully set forth.

January 12, 1860, Letters Patent No. 28,663 were granted to me for the distillation of oil from resin, in which patent I described different qualities of oil, called, respectively, Nos. 1, 2, 3, and 4.

These different oils I use to form my axle-grease in the following manner: I first dissolve one-half pound of sal-soda in three pints of water, and mix the same with one-half gallon No. 1 rosin-oil and two and a half gallons No. 4 rosin-oil. These are then stirred together, after which ten pounds of fine sifted lime are added and stirred, when it is allowed to stand for about six hours, so that the sedi-

ment or foreign matter will settle to the bottom. I then mix one gallon No. 1 rosin-oil, three and a half gallons No. 2 rosin-oil, and four and two-thirds gallons No. 3 rosin-oil, which are placed in a keg or other vessel, after which the first mixture above described is poured off into such vessel, and the whole thoroughly stirred, when the axle-grease is completed.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The compound for axle-grease herein described, composed of sal-soda, water, lime, and the four qualities of rosin-oil known as Nos. 1, 2, 3, and 4, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 17th day of May, 1879.

SAMUEL FRAZER. [L. S.]

Witnesses:

THOS. J. SHEEAN.

WILLIAM WIPPON.