UNITED STATES PATENT OFFICE.

CHARLES CHITTERLING, OF DUNKIRK, NEW YORK.

COMPOSITION FOR LUBRICATING PURPOSES.

Specification forming part of Letters Patent No. **29,243**, dated July 24, 1860.

To all whom it may concern:

Be it known that I, CHARLES CHITTERLING, of Dunkirk, in the county of Chautauqua and State of New York, have invented a new and Improved Composition to be Mixed with Oil for Lubricating Purposes; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to produce a grease which will prevent the axles from heating even if they run at a very high speed, which will not gum, and which is cheap in the manufacture and economical in its use.

My invention consists in a composition of oxalic acid, Epsom salts, lamp-black, sulphur, and black lead, which, when it is to be used, is diluted with oil and applied to the axles or to the journals of shafts in the usual manner.

The proportion in which I mix the above-named ingredients is about as follows: oxalic acid, twelve parts; Epsom salts, four parts; lamp-black, two and one-half parts; sulphur, four parts; black lead, four parts. These ingredients are well pulverized and mixed together in a common mortar or in a grinding-mill, as may be most desirable, and the mixture is put up in packages ready for sale.

When it is to be used two ounces of the composition are mixed with one quart of oil, and this fluid is now used in the usual manner.

The peculiar proportion in which the above-named ingredients are mixed together and the nature of the different ingredients themselves give to this lubricator a superior effect to all others heretofore in use. It has sufficient body to last for a long time when applied to an axle or to a journal, and it does not gum, and at the same time it does not allow the axle to heat, even when running at a very high speed. It can be manufactured cheap, and it is quite economical in its use, so that all railroad-engineers and machinists, as well as owners of wagons or other running-gear, will find it to their advantage to apply my grease instead of those lubricators which are now in use.

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

The composition of the within-named ingredients, mixed together in about the proportion herein specified, for the purposes set forth.

CHAS. CHITTERLING.

Witnesses:

HANSON A. RISLEY,

ALBERT S. COBB.