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LUBRICATING OIL.

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The object of this invention is the production of an oil for general lubricating purposes.

In the past, it was considered entirely possible and quite proper to use oils of varying viscosities for different purposes.

When an oil was to be used in a pump or in a mechanism subjected to or operating at a low temperature, a light and readily flowing oil was employed with a degree of satisfaction.

When an oil was to be employed in a mechanism operating in or under high temperature, a heavier oil was employed, and even though the heavy oil was not entirely efficient, due to its non-fluid qualities, and to the fact that a heavy deposit of carbon might result from its use, still, it was believed that a portion of the efficiency might be sacrificed to obtain proper lubrication.

The oil which I am about to describe, although of the viscosity found in heavy lubricating oils, may be employed at high or low temperatures.

I have found that it is desirable to provide an oil of this nature for use on airships and in other places where hydro-carbon engines are used, or where changes in the temperature to very great extents may be expected.

In compounding my oil, I employ as a base any suitable mineral lubricating oil, such as the commonly termed machinery oil, which is obtained from the distillation of crude petroleum.

I obtain a quantity of mineral lubricating oil and for the purpose of highest efficiency and satisfaction, I take care that the mineral lubricating oil used be pure and clear and without foreign matter or sediment.

To a given quantity of mineral lubricating oil, I add about 20% in bulk of castor oil and about 20% of corn oil. I mix these oils under a temperature sufficiently high to cause a perfect blending, and the temperature that I have employed, ranges from 160° F. to 212° F.

I retain the mixed oils under this temperature for a period of time, sufficient to permanently blend the mixture and thereafter, the oil is decanted or drawn off, and is ready for use. I have found that castor oil when mixed with mineral lubricating oil at a low temperature remains in suspension in the mineral lubricating oil, but that when heated, even to the limited extent herein indicated with the admixture of corn oil, a perfect mixture results which does not show castor oil in suspension. The proportions of the oils employed are determined by a simple test, and to test my oil for a satisfactory mixture, I place a wick in a quantity of mineral lubricating oil and add thereto castor oil and corn oil until the wick burns without smoke or without the production of carbon, then my mixture is complete for all general purposes.

If a heavier oil is desired, a greater quantity of castor oil may be added. If an oil is required to stand temperature below 32° F., a slightly greater percentage of corn oil is added.

I am fully aware that modifications may be made within the scope of the appended claims, without departing from the principle or sacrificing the advantages of the invention, and as herein set forth, the percentages of the different oils employed may be changed at will.

Having carefully and fully described my invention what I claim and desire to obtain is:—

1. A lubricating oil consisting of 60% mineral lubricating oil, 20% corn oil, and 20% castor oil.

2. A lubricating oil consisting of 60% mineral lubricating oil, 20% corn oil, and 20% castor oil, blended at a temperature from 160° F. to 212° F.

Signed at the city of Watervliet, in the county of Albany, State of New York, this 28th day of February, 1925.

JOHN H. MACKLE.