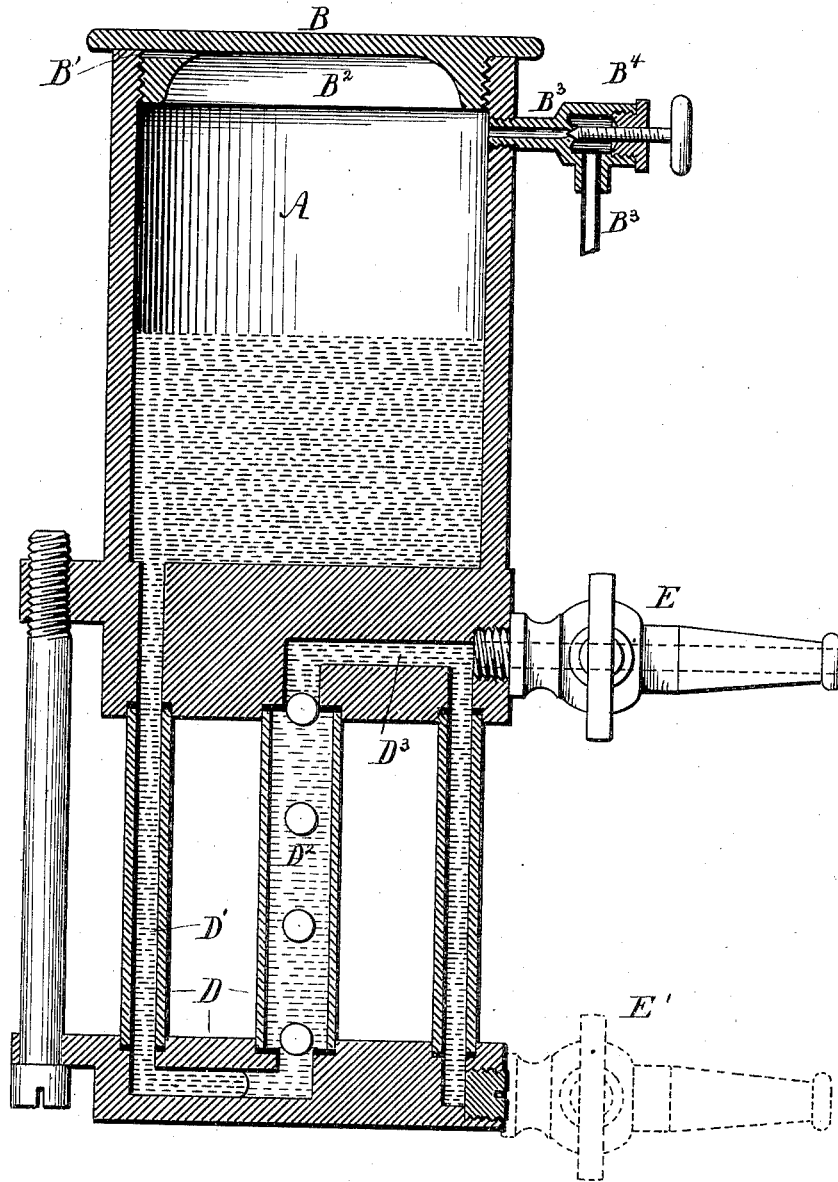


(No Model.)

J. L. BOOTH.
LUBRICATING APPARATUS.

No. 302,704.

Patented July 29, 1884.



WITNESSES:

A. & Baige
San Wych Budd

INVENTOR

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by his atty
Wm. W. Wagoner

UNITED STATES PATENT OFFICE.

JOHN LISTER BOOTH, OF CEDAR RAPIDS, IOWA.

LUBRICATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 302,704, dated July 29, 1884.

Application filed May 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN LISTER BOOTH, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Lubricating Apparatus; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof to enable others skilled in the art to make and use the said invention.

This invention relates to that class of lubricators which deliver oil slowly in adjustable quantities to machinery in motion, and has for its object the more certain and uniform delivery of oil without waste and, while in operation, permitting ready inspection and ascertainment of the quantity, frequency, and color of the oil as it is fed to the machinery, and a washing or filtering of the oil through a column of water.

The nature of this invention consists in a vessel having a removable cover and a vent therein, and means of closing such cover and vent, an inverted siphon leading from the bottom of said vessel, the rising limb of which siphon is transparent, and from the upper end of which transparent tube a tube provided with a stop-cock or valve or other equivalent means of constructing and stopping the flow of fluid from the siphon to the bearing.

I will now proceed to fully and particularly describe the mode of making and using this invention, referring in so doing to the drawing annexed and the letters of reference marked thereon.

The drawing shows a vertical central section of this invention.

A represents a cylindric vessel provided with a screw cap or plug, B, fitting tightly upon the rim of the vessel A when screwed down, and when raised slightly opens an air-vent, B', leading through the screw-thread to the cavity B² in the cap or plug B. The vent B' should be in fluid communication with the place into which the oil is to be delivered, so as to produce the same pressure upon the surface of the oil in the cup A as the oil meets on its delivery from the cock E.

In case the oil is applied in a cylinder, steam or valve chest, or in a vessel or space not under atmospheric pressure, a tube, B³, provided with a valve or cock, B⁴, is used to

connect it with such chamber, and the cap B is kept closed upon the vessel A.

Leading from the bottom of the vessel A is an inverted siphon, D, the descending limb D' of which may be either of metal or glass, for purposes of strength, metal being preferable. The rising limb D² of this siphon is larger than the limb D', and is transparent, and from the upper end of the rising tube D² a passage, D³, leads horizontally to a stop-cock, E, by which the flow of oil outward may be regulated.

For purposes of convenient application to machines, the passage D³ may lead through a descending tube, D⁴, and terminate in a cock, E', as indicated in the dotted portion of the figure.

The invention is used in the following manner: The cap B is removed and the cock E opened. Water is then poured in until the inverted siphon D is filled, after which the cock E is closed and oil placed in the cup A. The cover B is then replaced, and when the oil is to be applied to lubricate the machinery upon which the cup is to be used the cap B is unscrewed far enough to open the air-vent B', and the cock E cautiously opened until the desired quantity of oil flows therefrom. The oil passes in globules through the water in the glass tube D², and the frequency, color, and size of the globules are readily ascertained.

When it is desired to stop the flow of oil from the apparatus, the cap B is screwed down, so as to close the air-vent B', and the cock E remains in proper adjustment without requiring attention or regulation.

Having described my said invention, what I claim is—

A lubricating-cup consisting of a vessel having a cover provided with an air-vent and an inverted siphon adapted to contain water, leading from the bottom of said vessel, and having a transparent rising limb of larger caliber than the descending limb, and provided at its outlet with a valve or cock for adjusting and regulating the flow of lubricating-fluid, substantially as set forth.

JOHN LISTER BOOTH.

Witnesses:

EMORY F. STRONG,
ALFRED B. FAIRCHILD.