No. 839,787. PATENTED DEC. 25, 1906.

C. H. SHOBERT.

LUBRICATOR.

APPLICATION FILED MAY 22, 1906.

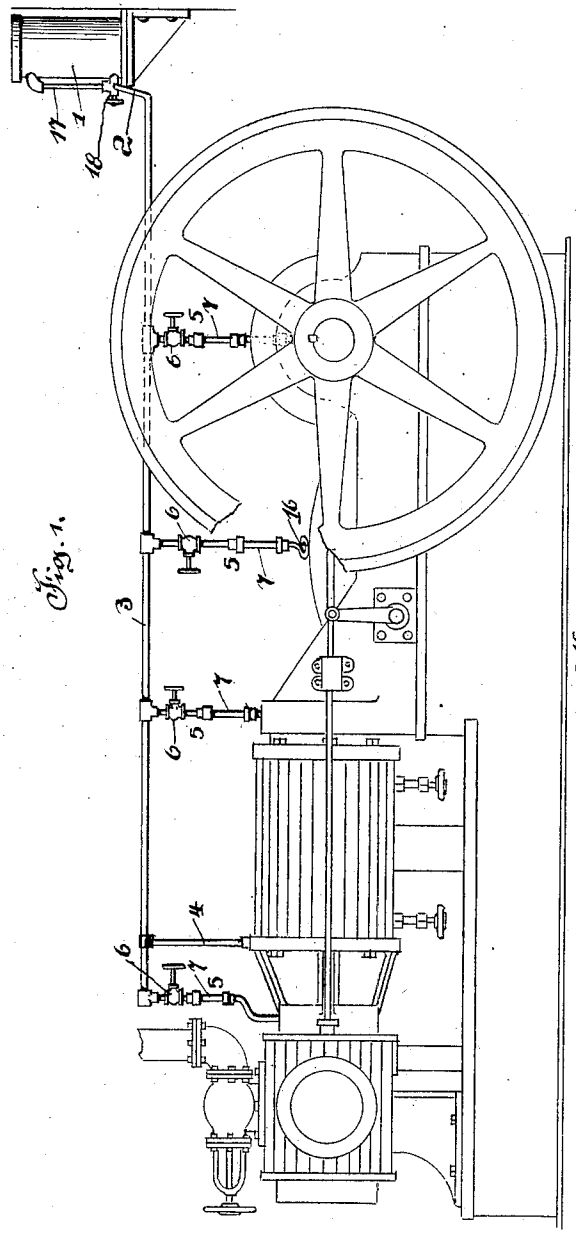


Fig. 1.

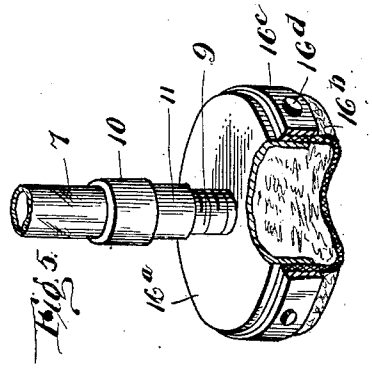


Fig. 5.

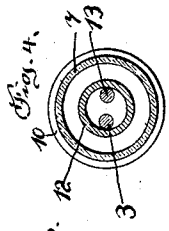


Fig. 4.

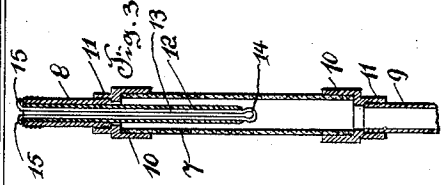


Fig. 3.

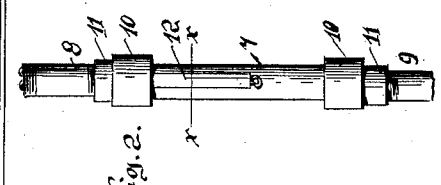


Fig. 2.

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LUBRICATOR.

No. 839,787. Specification of Letters Patent. Patented Dec. 25, 1906.

Application filed May 22, 1906. Serial No. 318,208.

To all whom it may concern:

Be it known that I, CLYDE H. SHOBERT, a citizen of the United States of America, residing at Brookville, in the county of Jefferson and State of Pennsylvania, have invented certain new and useful Improvements in Lubricators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to lubricators; and its primary object is to provide an automatic fountain-lubricator whereby the various parts of an engine or machine may be supplied with lubricant from a common source of supply, thus avoiding the labor incident to the use of the usual hand-oilers.

A further object of the invention is to provide a dropper of novel construction adapted for use in connection with my improved lubricating apparatus.

The construction of the improved apparatus will be fully described hereinafter in connection with the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a side elevation of an apparatus embodying the invention applied to a stationary engine. Fig. 2 is a side elevation of one of the discharge-pipes of the apparatus. Fig. 3 is a central longitudinal section of the same. Fig. 4 is a transverse section on the line $x\,x$ of Fig. 2, and Fig. 5 is a view in perspective of a wiper adapted to be used as a part of the apparatus.

The reference-numeral 1 designates a tank or reservoir for oil adapted to be located upon any suitable support in such position and relation to the machine to be lubricated as will insure a gravity-feed of the oil. In Fig. 1 I have shown this tank or reservoir supported above an engine and provided with a downwardly-inclined feed-pipe 2, connecting the tank with a distributing-pipe 3, the latter extending above the engine and being suitably supported thereon, as at 4.

Depending from the distributing-pipe 2 are a plurality of discharge-pipes 5, suitably connected to the pipe 3 to receive oil therefrom and each provided with a valve or cock 6 to regulate the flow of oil therein. The lower end of each of the discharge-pipes is open for the escape of lubricant, and said lower ends of the discharge-pipes direct and discharge the oil to the points upon the machine which require lubrication. The number and location of the pipes 5 will of course vary with different engines or machines upon which the improved apparatus is employed, the invention being obviously not restricted to any specific number or relative arrangements of said pipes. At any convenient point between the ends of each discharge-pipe and below its valve 6 I provide a glass tube 7, which permits an inspection of the pipe to observe the flow or feed of oil therein.

I preferably construct the discharge-pipes 5 of detachable sections, the glass tube 7 forming one section, while the other sections 8 and 9 are of metal. The ends of the tube 7 are cemented into couplings 10, each of said couplings having an internally-threaded socket 11 for the attachment of the metal pipe-sections 8 and 9.

In each of the discharge-pipes I preferably employ a dropper consisting of a metallic tube 12, fitted within the upper section 8 of the discharge-pipe and extending down within the glass tube 7 and a wire 13 bent upon itself to form a loop 14, which depends below the lower end of the tube 12, the ends 15 of said wire being bent outward to engage the upper end of the pipe-section 8, as best shown in Fig. 3. This construction permits of the cleaning of the tube 12 to prevent clogging, it being only necessary to bend up the ends 15 of the wire to allow it to be withdrawn from the tube 12. This dropper device insures the required drip or gradual feed of oil through the discharge-pipes, and the detachable connection of the sections of said pipes by the couplings 10 allows of the thorough cleaning of the pipes when necessary.

Where oil is to be supplied to a reciprocating element of an engine or machine, I preferably provide the lower end of the discharge-pipe with a wiper of any desired form, against which the moving element of the machinery will contact with a wiping action. This is shown in Fig. 1, where one of the discharge-pipes 5 is provided at its lower end with a shoe or wiper 16, of fabric or like yielding material, adapted to be kept saturated with oil feeding through the discharge-pipe.

While any suitable construction of wiper may be employed, I have shown in Fig. 5 a wiper consisting of a hollow cup-shaped casting 16^a, having a threaded opening to receive the threaded lower end of the pipe-section 9, a closure 16^b for said casting made of wicking or like absorbent material adapted to absorb the oil, and a ring 16^c for clamping the absorbent material in position, said clamp-

ing-ring being removably secured by set-screws 16^d.

The tank 1 is provided with a glass gage or sight-tube 17 to indicate the height of oil in the tank, and a suitable valve or cock 18 controls the flow of oil from the tank. In practice it is not necessary to manipulate the discharge-pipe valves to shut off the oil-feed, as the turning of the tank-valve 18 will suffice, the oil remaining in the distributing and discharge pipes being retained therein by the outer air-pressure.

The utility of the improvement will be readily understood from the foregoing description in connection with the drawings.

What I claim, and desire to secure by Letters Patent, is—

1. A lubricating apparatus comprising a tank or reservoir, a distributing-pipe leading therefrom, a discharge-pipe consisting of detachable sections one of which is a transparent tube, and a dropper consisting of a metallic tube arranged within said transparent tube, and a wire extending through and depending below said metallic tube.

2. In a lubricating apparatus, a discharge-pipe comprising a plurality of detachable sections and a looped wire adapted to serve as a dropper arranged within one of said sections.

3. In a lubricating apparatus, a discharge-pipe consisting of detachable sections, in combination with a dropper consisting of a metallic tube arranged within one of said sections, and a wire extending through said tube and bent upon itself to form a loop projecting below the lower end of said tube.

In testimony whereof I affix my signature in the presence of two witnesses.

CLYDE H. SHOBERT.

Witnesses:

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