J. B. WICKERSHAM.

Lubricators.

No. 146,734. Patented Jan. 20, 1874.

Fig. 1.

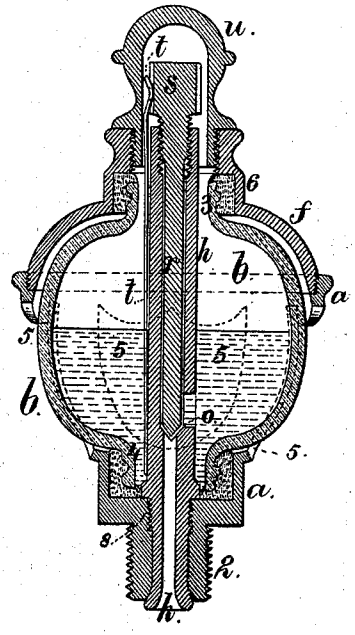
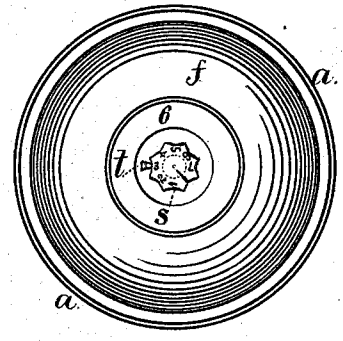


Fig. 2.



Witnesses,

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A.M. PHOTO-LITHOGRAPHIC Co. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

JOHN B. WICKERSHAM, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN LUBRICATORS.

Specification forming part of Letters Patent No. **146,734**, dated January 20, 1874; application filed November 25, 1873.

To all whom it may concern:

Be it known that I, JOHN B. WICKERSHAM, of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Lubricators, of which the following is a specification:

This lubricator is made with a metallic shell, into which is secured a globular, or nearly globular, oil-reservoir, with an opening at the bottom or at both ends. The metallic shell is provided with openings in the lower part of the side, so as easily to observe the condition of the oil. Within the reservoir is a tube passing through the bottom of the shell, and firmly secured thereto, and a valve with screw-stem is applied to this tube, and a graduated head and holding-finger may be employed in addition, so that the quantity of oil passing to the part to be lubricated is accurately regulated. A screw-cap closes the neck of the metallic shell.

In the drawing, Figure 1 is a vertical section of the lubricator, complete; and Fig. 2 is an end view of the valve-spindle and index.

The metallic case *a* is made with a screw, 2, at one end, for attaching the lubricator to the part where lubrication is required. The case *a* is of a size to receive the glass reservoir *b*, that is globular, or nearly so, in its general shape, and at the upper and lower portions openings or necks 3 and 4 are provided. The neck 4 passes into the recess at the bottom of the case *a*, and it is there secured by plaster, or a washer, or any suitable packing. The sides of the case *a* are open, as at 5, so as to allow the glass reservoir *b* to be observed, especially at the lower portion thereof, where deficiency of oil or accumulation of sediment should be noticed. The cap *f* to the case *a* is to be screwed into the upper end of the case *a*. It has a neck, 6, into which the upper end, 3, of the reservoir passes, and into which it is secured by cement, a washer, or suitable packing. The oil-tube *h* is made with a screw, at 8, to secure it within the opening through the bottom end, 2, of the metal case *a*, and at the lower end such tube *h* is secured additionally by being spread or riveted up within the countersunk end of the screw 2, as shown. The tube *h* is extended upwardly, and openings or inlets are provided therein. There may be two or more above the seat *o*, and within this extension of the tube *h* is the valve-stem *r*, with a conical point or valve at its lower end. The stem *r* is made with a fine-threaded screw, entering the upper end of the tube *h*, or passing through a standard, forming a support for said stem, and a head, *s*, to the said spindle serves to adjust the same and the valve with great accuracy, so as to allow only the required quantity of oil to pass through the valve-seat, or to shut off the escape of oil entirely. The spring or a finger, *t*, bearing against the side of the head *s*, prevents the screw-spindle and valve being shaken out of place by any vibration to which they are subjected; and, to facilitate adjustment, the sides of the said head are fluted and numbers placed upon the head, (see Fig. 2,) so that the valve can be opened to a given position after having been closed.

In order to prevent the oil spilling, especially with loose pulleys, a screw-stopper, *u*, is provided to the neck 6 of the cap *f*, and this stopper *u* is hollow, so as to receive the projecting end of the spindle.

This lubricator is very strong. The glass is protected from concussion; the oil is visible, and the quantity employed for lubrication may be adjusted with the greatest accuracy, or the supply stopped.

This character of reservoir might be used with the oil-feeder shown in the reissue, No. 4,658, of my patent numbered 70,058, or with any other character of lubricator to which it is adapted.

I claim as my invention—

1. A nearly-globular glass reservoir, *b*, with openings at the upper and lower parts, in combination with an inclosing metal case made in two parts, the lower portion, *a*, having open-work, and the upper portion, *f*, screwing upon the same, and provided with a neck, 6, and stopper *u*, substantially as set forth.

2. The fluted head *s* to the valve-spindle *r*, in combination with the spring-finger *t*, attached to the upper end of the tube *h*, as and for the purposes set forth.

Signed by me this 21st day of November, 1873.

JOHN B. WICKERSHAM.

Witnesses:
NORMAN H. STEVENS,
JAS. MCCARTNEY.