No. 682,550. Patented Sept. 10, 1901.

L. KACZANDER & E. K. HILL.

OILER.

(Application filed May 23, 1901.)

(No Model.)

Fig. 1.

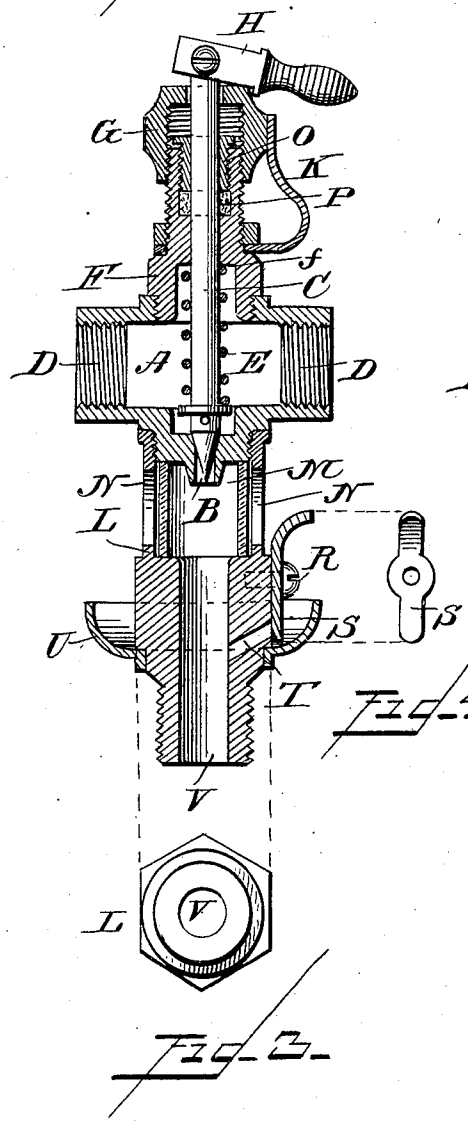


Fig. 2.

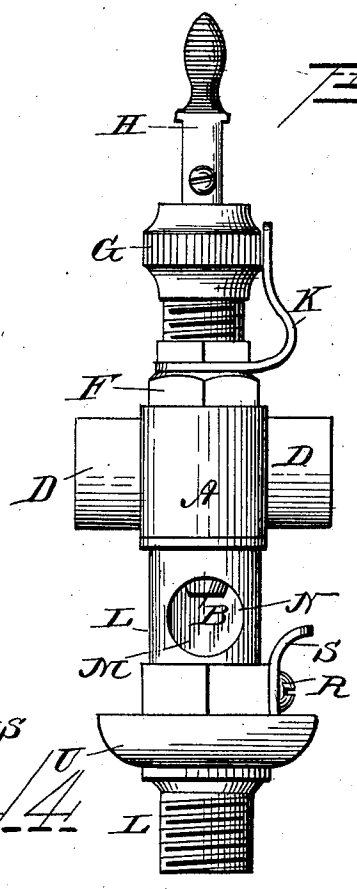


Fig. 4.

Fig. 3.

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UNITED STATES PATENT OFFICE.

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OILER.

SPECIFICATION forming part of Letters Patent No. 682,550, dated September 10, 1901.

Application filed May 23, 1901. Serial No. 61,587. (No model.)

To all whom it may concern:

Be it known that we, LEOPOLD KACZANDER, of the city, county, and State of New York, and EDWARD K. HILL, of the city and county of Worcester, in the State of Massachusetts, have invented certain new and useful Improvements in Oilers, of which the following is a specification.

This invention relates to that class of oil-valves which communicate with a constant source of oil-supply under pressure and which are generally connected one to the other by means of suitable piping to make the source of oil-supply common to a number of such oil-valves.

It is our object to properly pack the sliding regulating-spindle to make it tight under pressure, which object has not heretofore been accomplished in a practical and satisfactory manner, and to provide simple, efficient, and inexpensive means for oiling each bearing by hand, if at any time or from any cause the pressure-supply be interrupted or cut off. The valve chamber or casing being connected when in operation to an overhead reservoir is always full of oil above the outlet in the lower part of the casing controlled by the regulating-valve; but by the arrangement just described the valve stem or spindle is packed in such manner as to make the joint between it and the packing-box cap tight under pressure, thus effectually preventing oil from being pressed upward and out between the spindle or stem and the cap-nut.

We will first describe our improvements in connection with the accompanying drawings, forming part of this specification, and will then point out more particularly in the claims those features which we believe to be new and of our invention.

In said drawings, Figure 1 is an axial section of an oil-valve construction embodying our improvements. Fig. 2 is a side elevation of the same. Figs. 3 and 4 represent details to be referred to hereinafter.

A represents a valve-casing provided at its lower end with an outlet B, which is controlled by the tapered point of the regulating-stem C. Cast in one with the valve-casing are one or more branches D, which are interiorly threaded for reception of the pipes or tubing which connect the oil-valves with one another and with the common source of oil-supply.

E is a coiled spring around the stem C, which acts to press the tapered end of the stem down into its seat, so as to close the outlet B. It is confined between a collar on the lower end of the stem and the cross-wall *f* of the tubular cap F, which latter is screwed into the top of the casing A.

G is a cap-nut which is vertically adjustable upon the exteriorly-threaded neck of cap F. This nut is retained in its adjusted position by a holding-spring K, which prevents the cap-nut from accidentally turning or screwing up or down. The regulating-stem C passes centrally through the cap F and cap-nut G, and to its protruding end is pivoted what is known in the art as a "signal-lever" H. When the lever is turned down in the position shown in Fig. 1, the regulating-stem C is depressed by its spring, so as to close the outlet B. When, on the contrary, the signal-lever is turned up in the position shown in Fig. 2, its heel or butt by bearing against the top of the cap-nut will raise the regulating-stem C so as to open the outlet and will maintain the stem in this position. By adjusting the nut G vertically on the neck of the cap F the tapered end of the stem C will be lifted more or less, as the case may be, thus regulating the supply of oil to the bearing to be lubricated.

To the under side of casing A is attached a sight-feed shank L. By means of the exteriorly-threaded lower end of the same the valve is attached to the bearing to be lubricated. The upper part of the shank contains the glass tube M, through which (and by means of the openings N in the shank) the dropping oil may be observed.

Inside of the cap-nut G is a follower-nut O, inserted into the interiorly-threaded upper end of cap F, forming a packing-box P, into which packing material, such as flax or rubber, may be placed and compressed by means of nut O, making a tight joint around the stem without interfering with its proper up-and-down movement.

Part of the shank L is of hexagonal contour, as illustrated in Fig. 3, and into one of

the flat sides of the same is tapped a pin R, around which swivels a flat plate or gate S, (shown in front elevation in Fig. 4,) covering or uncovering, as the case may be, a hole T in the shank L, leading from a cup-shaped vessel U, secured on and surrounding the shank, into the central bore V of shank L. It will be readily observed that oil poured into vessel U from an ordinary oil-can will find its way into the bearing through opening T when the swivel-plate S uncovers the same. This hand-oiling is entirely independent of the sight-feed oil-valve.

In operation the hole T is kept closed by the plate S, and the opening B is opened to the required extent to feed the oil from the source of pressure-supply through the sight-feed M and through the bore V to the bearing to be lubricated. Should the oil-supply from chamber A and connections D be at any time interrupted from any cause, then the valve C is closed and the oiling can be accomplished by hand from vessel U through opening T.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with the valve-casing provided with an outlet, and the regulating-valve stem for controlling said outlet, of the shank provided with the vessel U surrounding the same and provided also, below the valve-controlled outlet of the valve-casing, with the opening T through which said vessel U can communicate with the interior of the shank, substantially as and for the purposes hereinbefore set forth.

2. The combination with the valve-casing provided with an outlet, and the regulating-valve stem for controlling said outlet, of the shank provided with the vessel U, and provided also below the valve-controlled outlet of the valve-casing, with the opening T through which said vessel U can communicate with the interior of the shank, and a swivel-plate S controlling the opening T, substantially as and for the purposes hereinbefore set forth.

3. In oil-valve construction a valve-chamber communicating with a source of oil-supply under pressure, a packing-box at the upper end of said cap, a cap-nut movable on said cap, a regulating-valve stem controlling the outlet from the valve-chamber and passing through said cap, packing-box and cap-nut, a sight-feed shank below the outlet from the valve-chamber, a hand-oiler cup, a passage in the shank below the sight-feed through which said cup communicates with the interior of the shank, and a gate by which said passage is controlled, all arranged and operating substantially as and for the purposes hereinbefore set forth.

In testimony whereof we have hereunto set our hands this 22d day of May, 1901.

LEOPOLD KACZANDER.
EDWARD K. HILL.

Witnesses:
ADOLPH BARGEBUHR,
EDWARD J. SCULLY.