A. D. KILBORN.

Oil-Cup.

No. 206,579. Patented July 30, 1878.

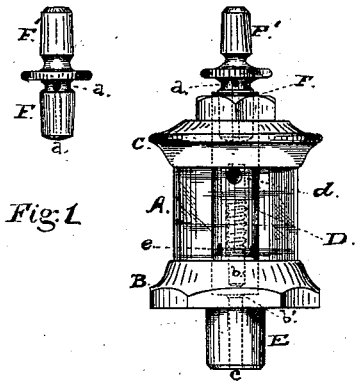


Fig: 1.

Fig: 3.

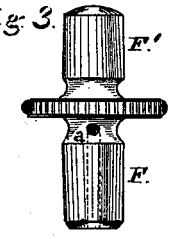
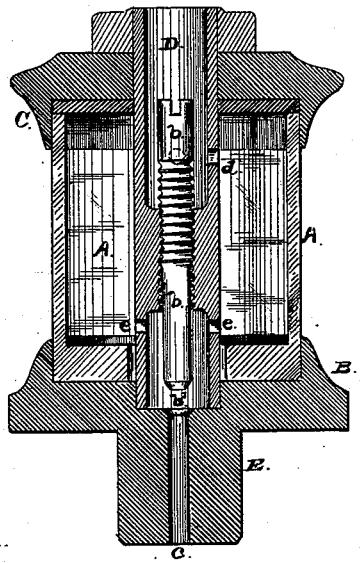


Fig: 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALDEN D. KILBORN, OF OAKLAND, CALIFORNIA.

IMPROVEMENT IN OIL-CUPS.

Specification forming part of Letters Patent No. **206,579**, dated July 30, 1878; application filed March 30, 1878.

To all whom it may concern:

Be it known that I, ALDEN D. KILBORN, of Oakland, in the county of Alameda and State of California, have invented a certain new and useful Improvement in Oil-Cups for Engines and other Machinery, which invention is fully set forth in the following specification and shown in the accompanying drawing.

In the drawing herein referred to, Figure 1 is a view of my improved oil-cup, in which the flow of oil from the outlet is controlled by admitting the air to or shutting it off from the reservoir. Fig. 2 is a detail view, in section. Fig. 3 is a detail view of the reversible plug or stopper.

My invention consists in a novel means of controlling the flow of oil in oiler-cups for engines and other machinery, by the employment and combination, with the oiler-reservoir, of a plug or stopper, with a passage leading from the interior of the cup to the outer air, by which the atmospheric pressure is admitted to or excluded from the oil in the reservoir or its feeding-tube at pleasure, and the supply of oil to the parts to be lubricated is turned on or is stopped altogether, as desired, and this without changing or interfering with the adjustment of the parts that regulate the quantity of oil flowing from the feeder-tube.

In the drawing herein referred to, my invention is shown as applied to an oiler used for the guides in locomotive-engines; but it is also applicable to other species of oilers wherever used. The reservoir A is formed of glass, with metal bottom B and cap C, in the usual manner, and within it is situated the feeding-tube D, leading from the inlet in the cap down through the center to the bottom plug, E, projecting from the base B.

The feeding-tube D has a central passage leading from its top to the outlet-passage *c* in the plug E. This tube, within the reservoir, is provided with two sets, *d e*, of perforations, the former being near the top of the reservoir, while the latter are situated near the bottom of such reservoir. The bore of the feeding-tube is made smaller at a point between the perforations *d e*, and is provided with an internal screw-thread, with which engages the thread on the regulating-spindle *b*, closing the bore of the tube at this point. The regulating-spindle can be adjusted in the feeding-tube by means of a screw-driver, and has a conical lower end, which fits a beveled seat, *b'*, at the upper end of the passage *c*.

The oil-reservoir A is filled by pouring the oil into the open top of the tube D, above the spindle *b*, from which tube it flows through the perforations *d* into the reservoir. For lubrication, the oil passes from the reservoir into the feeding-tube below the spindle, through perforations *e*, and from thence to the journal through the passage *c*. This flow is regulated by the adjustment of the spindle *b* nearer to or farther away from the seat *b'*.

As thus constructed, it will be readily seen that in all such oil-cups or oilers the flow of oil will be permitted or shut off altogether by admitting or excluding the atmospheric pressure; and this I accomplish in a simple and effective manner without interfering with or changing the adjustment of the feed. By this employment of the stopper or plug F, having a passage, *a*, communicating with the interior of the oiler or its feeding-tube and with the outer air, and having also a blank end or plug, F', of the same size as the other, but without any passage whereby the plug F can be withdrawn from the upper end of the feeding-tube D, and its other end, F', inserted in the opening, the air is entirely shut off from the reservoir or the feeding-tube, and the flow of oil ceases; and by again reversing the stopper and placing the end F into the opening, the air will pass into the cup and the flow of oil will begin again.

The operation of the oiler is thus entirely under the control of the engineer or attendant, and it can be quickly brought into or thrown out of action without changing the position of the feeding-spindle or other parts that govern the quantity of oil flowing from the reservoir.

Having thus fully described my invention, what I claim therein, and desire to secure by Letters Patent, is—

In a lubricating-cup, the combination, with the feed-tube D, having an open upper end, of the reversible plug F F', fitting into the said tube, and constructed with one end solid

and imperforate and with an air-passage, *a*, in the other end, so that by setting the solid end F′ of the plug into the top of the feed-tube the air will be entirely shut off from the top of the oil-chamber, and by reversing the plug and placing the end F in the said tube the air will be admitted to the oil-chamber, substantially as described and shown.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 5th day of March, 1878.

ALDEN D. KILBORN. [L. S.]

Witnesses:
C. W. M. SMITH,
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