F. LUNKENHEIMER.
Oil-Cup.

No. 212,480. Patented Feb. 18, 1879.

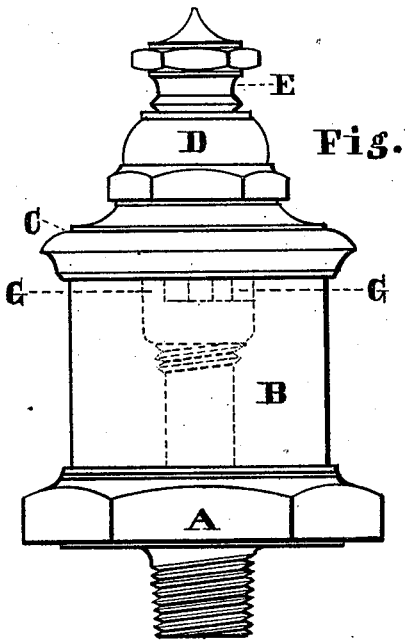


Fig. 1.

Fig. 2.

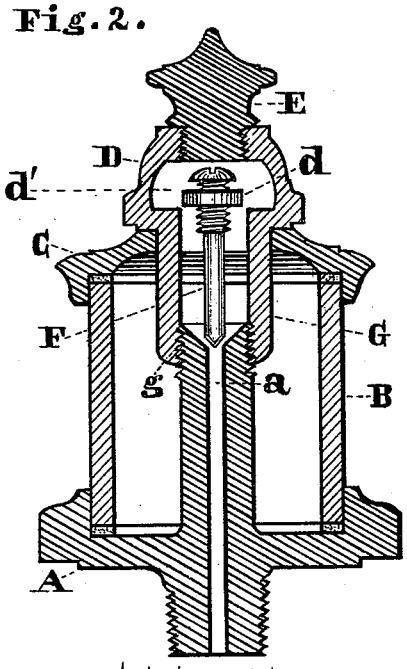


Fig. 3.

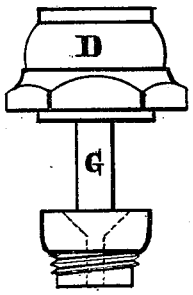
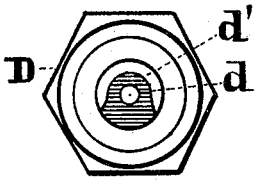


Fig. 4.



Attest

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UNITED STATES PATENT OFFICE.

FREDERICK LUNKENHEIMER, OF CINCINNATI, OHIO.

IMPROVEMENT IN OIL-CUPS.

Specification forming part of Letters Patent No. **212,480**, dated February 18, 1879; application filed January 21, 1879.

To all whom it may concern:

Be it known that I, FREDERICK LUNKENHEIMER, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Oil-Cups, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of an oil-cup for heavy or slow flowing oils, when used for lubricating crank or eccentric motions—specifically an oil-cup which can be opened and filled without removing the tempering-screw or altering the feed.

My invention further consists in so arranging the tempering-screw within the yoke of the cup that after it has once been adjusted it cannot conveniently be tampered with.

In the accompanying drawings similar letters of reference indicate similar parts.

Figure 1 is an elevation of my improved oil-cup; Fig. 2, a sectional elevation. Fig. 3 is an elevation of yoke, showing arms holding the nut; and Fig. 4, a view, in plan, of the yoke of the cup.

A represents the base of the oil-cup, with a screw-stem for insertion into the oil-hole of the stub end of a shackle-bar or strap of an eccentric, and vertical oil-tube for supplying the oil to the journal, set centrally, and finished with a concave mouth or opening, into which the conical end of the screw F projects, to graduate the opening through which the oil flows to the tube *a*. The upper end of the tube *a* is threaded on its external surface, and the yoke D, which is provided with a nut on its lower end, screws on the stem or tube *a*, and binds the cylinder B and cap C to the base.

It is not essential that the cylinder B shall be separate from the base A, as shown, except when made of glass, in which case the base A and cap C are provided with annular rims, fitting loosely over the ends of the cylinder, and between the ends of the cylinder and base A and cap C cork washers are interposed, to modify the strain and prevent injury to the glass.

The yoke D is of hemispherical form on the upper surface, and is cored out internally, to provide a duct or opening for the introduction of oil to the cylinder or body of the cup, and is provided with a cheek or lug, *d*, on its interior surface, through which the tempering-screw F is screwed.

The tempering-screw is provided with a slotted head for a screw-driver point; but it may be squared for a socket-wrench, when greater security against tampering with the adjustment of the cup is desired.

The nut on the lower end of the yoke is cast or otherwise attached to the arms G G, and these arms are made narrow and taper toward the nut, so that the least obstruction possible shall be offered to the flow of oil into the conical concave opening of the tube *a*. These arms are sufficiently narrow at the nut to permit the oil to "throw" into the concave mouth of the tube *a*, when it happens that the arms G G are set in the direction of the motion of the cup.

The opening in the yoke D is tapped, and a screw-plug, E, is fitted to this to close the cup after it has been charged with oil. Whenever it is necessary to renew the oil in the cup it is only requisite that the screw-plug E be removed, when the cup can be refilled without deranging the adjustment of feed to the hollow central stem, *a*.

The oil-cups with variable feed hitherto in use possess what experience has shown to be a serious defect—viz., the cap cannot be removed for the purpose of refilling the cup without at the same time removing the adjusting-screw and deranging the feed, and much time and patience are required to properly renew the adjustment; besides, the consequent waste of oil or cutting of crank-pin or eccentric before the feed is again perfected are serious objections to the oil-cups now in use.

In my improved oil-cup no change in the adjustment is necessary so long as the consistency of the oil or other lubricant and the strain on the bearing are uniform, and no alteration of the feed occurs when the cup is opened to receive a new supply of oil.

I am aware that an oil-cup with the central hollow stem finished with a concave mouth or opening is the subject of a patent to James Meehan, dated August 23, 1870. This I do not claim; neither do I claim the adjustment of the flow of oil in an oil-cup by means of a

conical concave opening in the hollow stem and a conical-pointed adjusting-screw, as this I believe to be old and well known.

Having described my invention, what I claim is—

The yoke D, having a cheek or nut, *d*, cast on its interior surface, and having an internal duct or opening, *d'*, for the passage of oil to the body of the cup, and having arms G G and nut *g*, in combination with a slotted or squared head adjusting-screw, F, and stem or tube *a*, with its concave mouth or opening, base A, cylinder B, cap C, and screw-plug E, for the purpose and substantially as shown and described.

In testimony whereof I have hereunto set my hand this 8th day of January, 1879.

FRED. LUNKENHEIMER.

Witnesses:
JOHN W. HILL,
E. C. MARTIN.