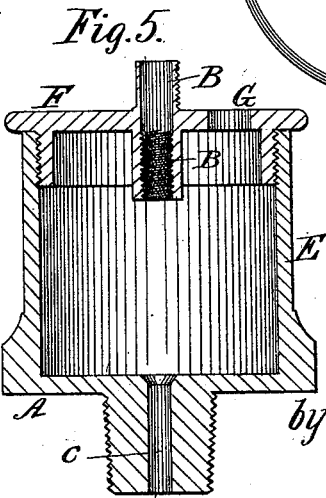
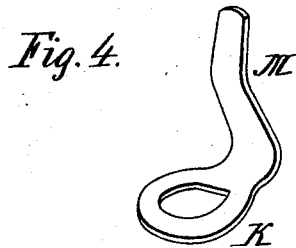
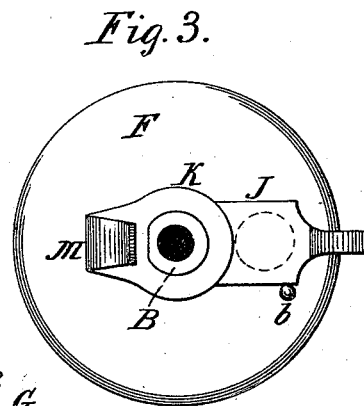
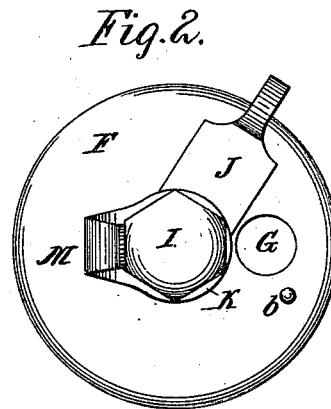
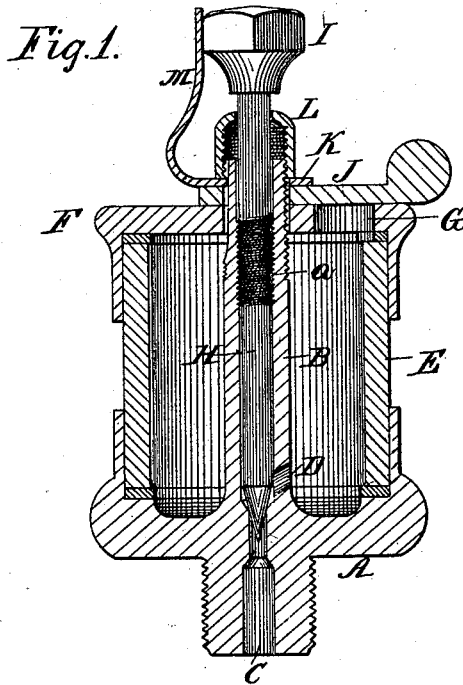


(No Model.)

E. LUNKENHEIMER.  
OIL CUP.

No. 418,578.

Patented Dec. 31, 1889.



Witnesses:  
W. C. Jirdinston.  
Charles Billou,

Inventor:  
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his Attorneys.

# UNITED STATES PATENT OFFICE.

EDMUND LUNKENHEIMER, OF CINCINNATI, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE LUNKENHEIMER BRASS MANUFACTURING COMPANY, OF SAME PLACE.

## OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 418,578, dated December 31, 1889.

Application filed February 4, 1889. Serial No. 298,625. (No model.)

*To all whom it may concern:*

Be it known that I, EDMUND LUNKENHEIMER, a citizen of the United States, residing at 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 full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.  
My invention is an improvement upon that shown and described in reissued Letters Patent No. 10,918, granted me March 15, 1887; and in its general features of construction my present cup is the same as that shown in said patent.

In the accompanying drawings, Figure 1 is a sectional elevation of my improved oil-cup. Fig. 2 is a top plan view of the cup. Fig. 3 is a top plan view with the valve-stem and binding-nut removed. Fig. 4 is a perspective view of the washer and spring. Fig. 5 is a sectional elevation of a modified form of cup.

The same letters of reference are used to indicate identical parts in all the figures.

A represents the metal base of the cup, having the upwardly-extending tube B communicating with the discharge-channel C in the base A, and provided with the orifice D opening into the interior of the cup.

E is the glass cylinder forming the body of the cup, and F the metal cap fitting thereon and having a central opening for the passage of the tube B, and an opening G at one side through which the cup is filled with oil.

H is the valve-stem, pointed at its lower end and having a threaded portion *a* engaging threads on the interior of the tube B, so that the valve-stem may by turning be adjusted up and down to regulate the feed of the oil through the channel C. The valve-stem is provided at its upper end with a polygonal thumb-nut I, by which it may be turned. The upper end of the tube B is threaded exteriorly, and has one side cut away or flattened, for a purpose to be presently explained.

J is a swinging scutcheon loosely swiveled on the tube B, so that it can be moved side-wise on the cap F to cover and uncover the filling-hole G, while *b* is a pin or stop on the cap F to limit the movement of the scutcheon J. K is a flat-sided or D-shaped washer fitted

around the tube B and resting on the scutcheon J, its flat side fitting the flattened portion of the tube B, so that the washer cannot be turned thereon.

L is a binding-nut screwed on the upper end of the tube B and serving to bind the base A, cylinder E, cap F, scutcheon J, and washer K together. The binding-nut thus regulates the friction against which the scutcheon J must be moved in uncovering and covering the filling-hole G, and by means of the D-shaped washer interposed between said scutcheon and nut and fitting the flat side of the tube B, the movements of the scutcheon to and fro in uncovering and covering the hole G are prevented from being communicated to and turning the nut L, so that the latter will always remain where set.

The parts of the cup thus far described are substantially the same as shown and described in my prior patent before referred to, and constitute a very simple and efficient oil-cup for most classes of work; but in the use of cups of this class for some purposes, especially in their use on locomotives, it is found necessary, or at least very desirable, to provide some additional means for positively holding the valve-stem H from being loosened and turned, and the adjustment of the feed thereby destroyed by the shaking and jarring of the cup. Different means have been provided for this purpose, consisting in one case of a pendent arm pivoted to the top of the valve-stem or an extension thereof, and having its lower end or edge arranged to engage and be held in different adjusted positions by notches in the outer edge of the cap F. As another means of accomplishing the same object, a coiled spring has been placed around the valve-stem between the top of the binding-nut and the bottom of the thumb-nut on the upper end of the valve-stem; but both of said devices have been objectionable, the first as being more or less clumsy and expensive and both proving inefficient where the cup was subjected to severe shaking or jarring.

In the present case I have produced, for accomplishing the above desired object, a device of the utmost simplicity and effectiveness, consisting of a flat metal spring M, bearing firmly against the flat sides of the thumb-nut

I, and under its simplest arrangement forming an integral upwardly-extending portion of the D-shaped washer K, as seen more particularly in Fig. 4. This spring is made of sufficient rigidity to bear against the nut I with sufficient force to firmly hold the latter against being turned by any shock or jar, while the nut is at the same time capable of being turned by the hand or a wrench against the frictional resistance of the spring.

While I have shown the thumb-nut as having plain flat sides and the upper end of the spring M shaped to bear flatly against said sides, I do not wish to be limited to the exact shape of said nut and spring; nor do I wish to be limited to the particular construction of the body of the cup. For instance, my invention is equally applicable to a cup whose body is constructed entirely of metal, as shown in Fig. 5, the sides and base being preferably cast in one piece and the top cap screwed into the body, in which case the tube B, not being needed to bind the several parts of the body of the cup together, may extend a short distance above and below the top cap F, thus affording a bearing for the valve-stem H, scutcheon J, washer K, and nut L. Again, while the simplest and most desirable arrangement of the spring M is to form it of one piece of metal with the washer K, yet it may be separate, and as a simple modification may form an upward extension of a secondary washer interposed between the D-washer K and binding-nut L.

Having thus fully described my invention, I claim—

1. In an oil-cup, the combination, with the

body of the cup having a central tube B projecting above its top, said tube being screw-threaded exteriorly and having a flattened side, of the valve-stem H, extending through said tube and provided with the thumb-nut I at its upper end, the cap, the swinging scutcheon J, swiveled on the projecting portion of the central tube B, and arranged to be moved sidewise to uncover and cover a filling-hole in the cap, a binding-nut L on the upper end of the tube B, and a flat-sided or D-shaped washer K, interposed between said scutcheon and binding-nut and fitting the flattened side of the tube B, said washer being provided with the integral upwardly-extending spring M, engaging the thumb-nut I, substantially as and for the purpose described.

2. In an oil-cup, the combination of the base A, glass cylinder C, cap F, having the filling-hole G, tube B, threaded at its upper end and having one side flattened or cut away, valve-stem H, extending through said tube and provided at its upper end with the thumb-nut I, swinging scutcheon J, swiveled on said tube and arranged to be moved sidewise to cover and uncover the filling-hole G, binding-nut L on the upper end of the tube B, D-shaped washer K, interposed between the scutcheon J and binding-nut L, and having the integral upwardly-extending spring M, engaging the thumb-nut I, substantially as and for the purpose described.

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Witnesses:

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