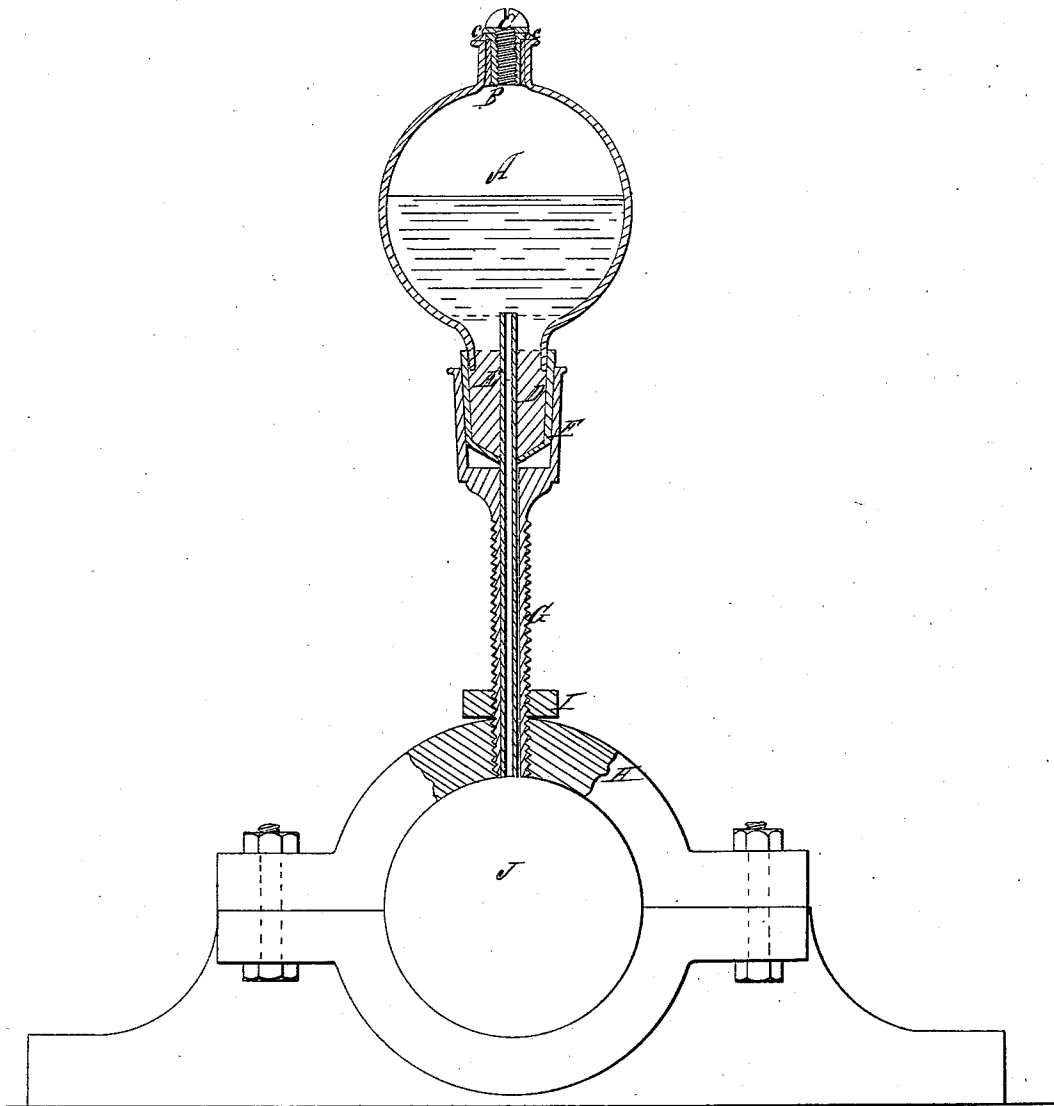


*B. Hilbert,*

*Lubricator,*

*N<sup>o</sup> 64,105,*

*Patented Apr. 23, 1867.*



*Witnesses:*

*H. C. Webber,  
Samuel Wright*

*Inventor:*

*B. Hilbert  
By Knight Bros  
Attys*

# United States Patent Office.

BENJAMIN HILBERT, OF CINCINNATI, OHIO.

Letters Patent No. 64,105, dated April 23, 1867.

## IMPROVEMENT IN LUBRICATORS FOR MACHINERY.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN HILBERT, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Lubricator for Oiling Machinery; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a device for lubricating those portions of machinery where friction is generated by the revolving or sliding of metallic surfaces upon each other, particularly the journal bearings of shafts, and consists in an apparatus by which a quantity of oil, kept in a suitable reservoir, is supplied to the desired surfaces through a tube which allows the proper quantity to escape only when the machinery is in motion, keeping the moving surface constantly supplied. My invention possesses the following advantages over other devices for the same purpose: A transparent reservoir for the oil, in which its ebb may be noted. A double tube, the outer one being screwed into the box of the journal or one of the parts to be lubricated, while the conducting tube of the reservoir is simply inserted in this outer tube, enabling the reservoir to be easily lifted out for filling at any time without disturbing the adjustment. The application of the end of the conducting pipe directly to the surface of the moving metal, so that said surface when at rest closes the orifice, thereby preventing waste, and when in motion draws out mechanically, and without the necessity of heating the journal, a proper quantity of oil for the desired purpose, the tubes being so constructed as to enable the adjustment of the orifice to a constant and perfect contact with the metal, as the end of the tube is ground off by friction. The reservoir being closed, may be inserted in an inclined position, if desired.

In the accompanying drawing, A is a globe of glass serving as a reservoir, having at its upper side a neck and orifice for filling. A tapped and screw-threaded metallic plug, B, is cemented into this neck and closed by a metal screw, C, and washer, *c*. A neck at the lower side of the reservoir A is cemented into a cup, D, of copper, or other suitable metal, through which passes a tube or pipe of the same, E. This cup, slightly conical in shape, is ground so as to make a perfectly tight joint with a second cup, F, in which it rests, the cup F being the upper portion of a tube, G, of sufficient internal diameter to allow the passage of the pipe E, and screw-threaded on the outside and screwed into the box H of a journal bearing. A pinching-nut I on the outer tube serves to adjust its insertion in the box, so that the lower end of the conducting tube E may rest upon the shaft J, and as it becomes worn away by friction the contact may thus be renewed, so that the shaft when at rest shall close the orifice of the tube.

I claim herein as new, and of my invention—

1. The transparent reservoir, consisting of a glass globe, A, in which the decrease of the lubricating material may be observed without detaching it from the bearing and allowing of its insertion in an inclined position.
2. A conducting pipe, E, with its end resting upon the journal or other moving metal, so that the surface of said metal closes the orifice when at rest, and when in motion acts mechanically to draw out a sufficient quantity of oil, as herein set forth.
3. A lubricating apparatus constructed in two portions, one permanently attached to the box, or in other desired position, while the reservoir and conducting pipe are simply inserted in this outer pipe so as to be removable at pleasure.
4. The arrangement of screw-threaded outer pipe G and pinching-nut I to enable the adjustment of the tubes, as shown and set forth.

In testimony of which invention I hereunto set my hand.

BENJAMIN HILBERT.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.