

(No Model.)

J. PETRUS, F. KOSZL & W. HEGENSCHIEDT.  
LUBRICATOR.

No. 562,835.

Patented June 30, 1896.

Fig. 1.

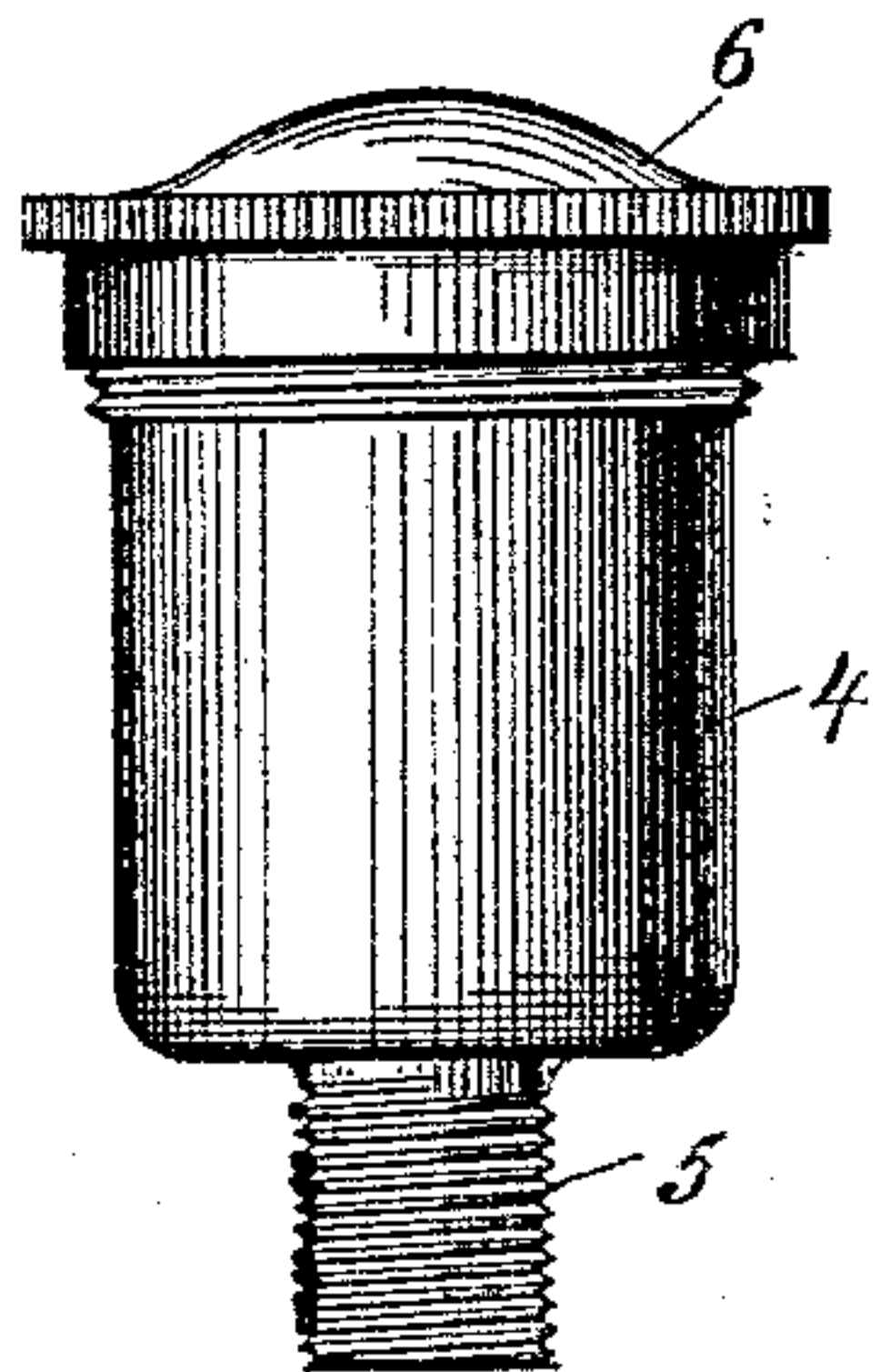


Fig. 2.

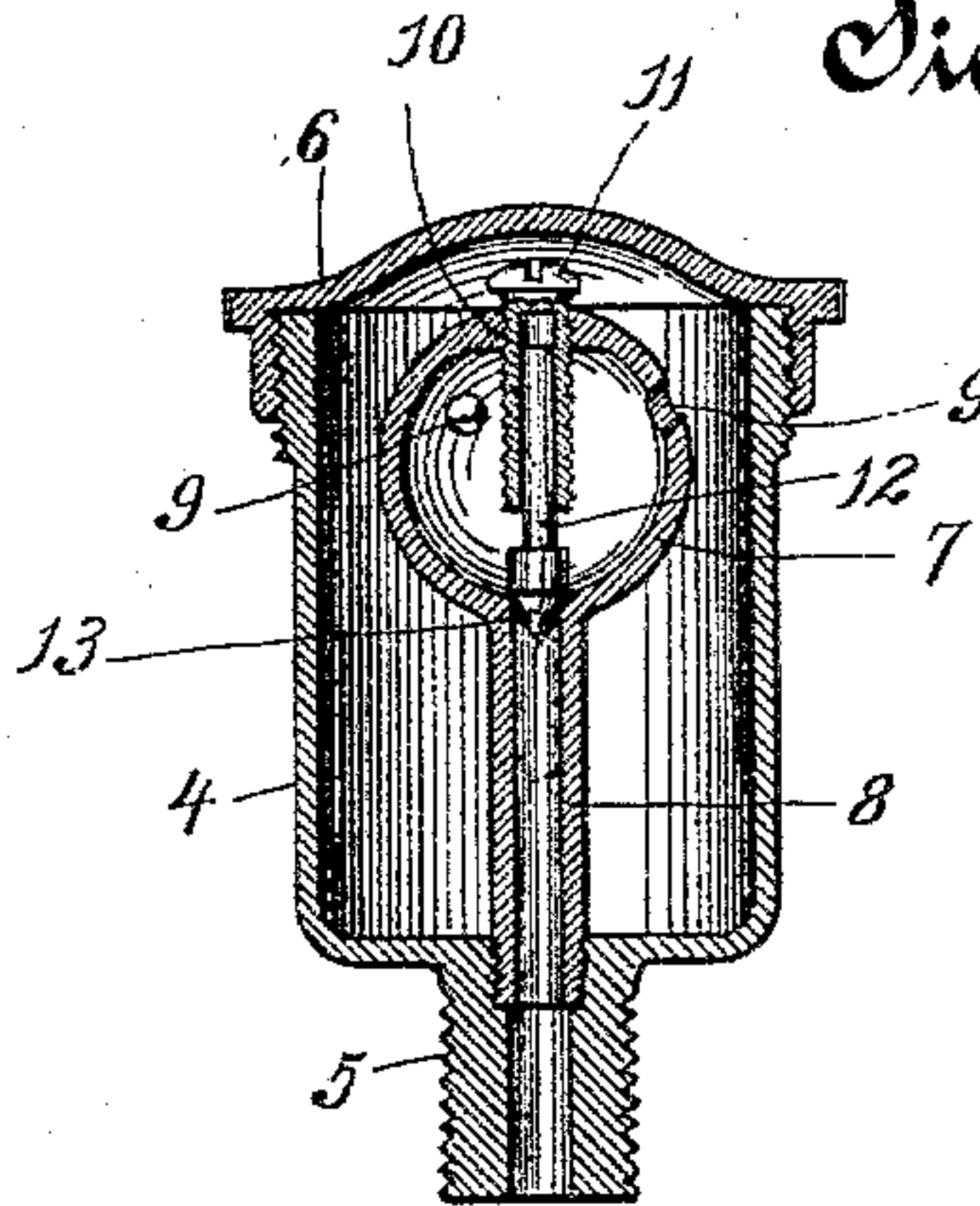
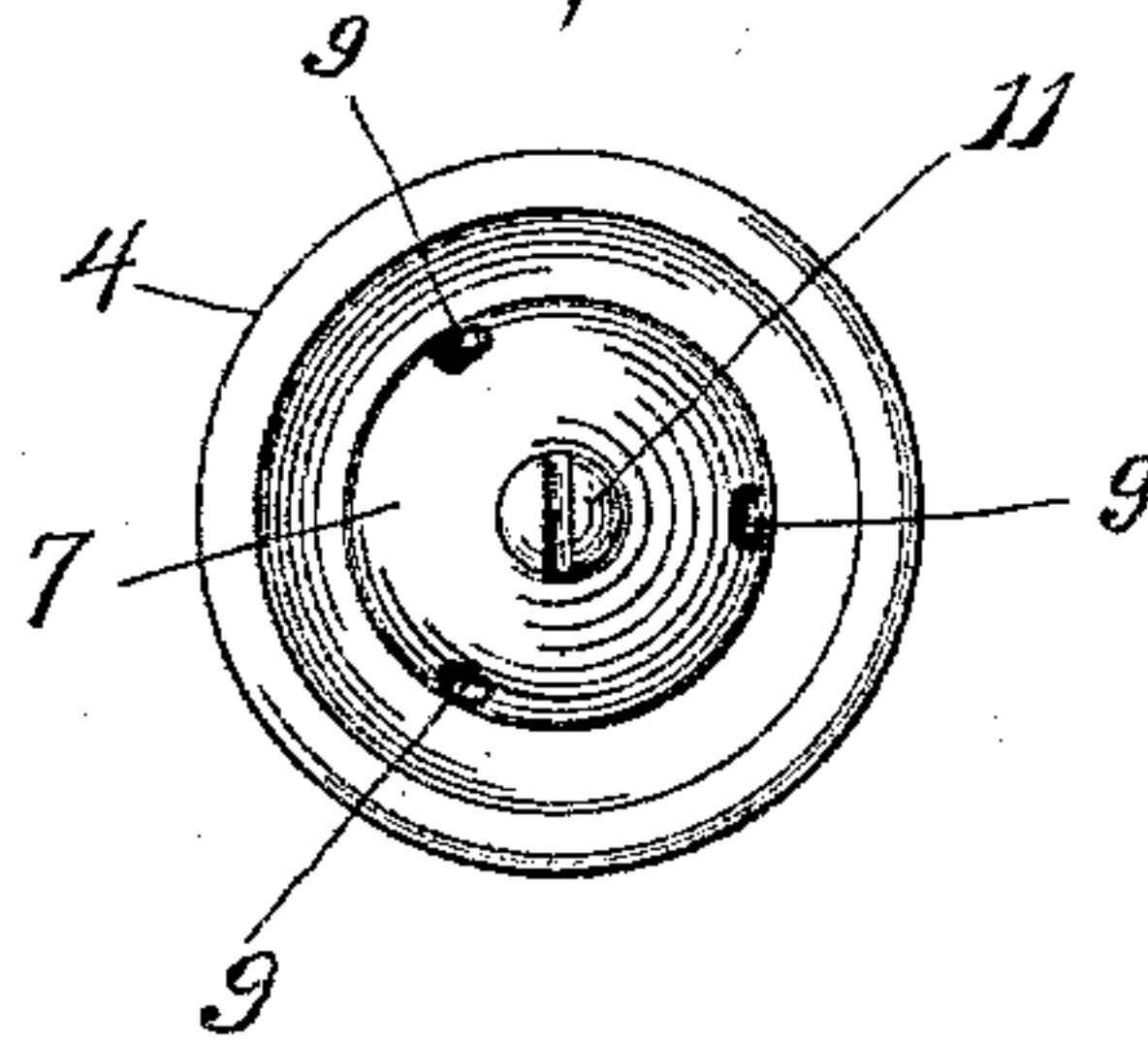


Fig. 3.



Witnesses.

*A. H. Keeney,*

*Anna C. Faust.*

Inventors.

*John Petrus,  
Franz Koszl,  
Wilhelm Hegenscheidt.  
By Benedict & Morsell,  
Attorneys.*



# UNITED STATES PATENT OFFICE.

JOHN PETRUS, FRANZ KOSZL, AND WILHELM HEGENSCHIEDT, OF  
MILWAUKEE, WISCONSIN.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 562,835, dated June 30, 1896.

Application filed June 29, 1895. Serial No. 554,399. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN PETRUS, FRANZ KOSZL, and WILHELM HEGENSCHIEDT, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Oil-Cups, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

Our invention has relation to improvements in oil-cups.

The device is particularly adapted for application to the hub of a loose pulley for feeding the lubricant to the bearing, the object being to provide an improved construction, whereby, as the wheel rotates, an even feed of oil to the bearing is secured, with provision for conveniently regulating the amount of oil so fed.

With the above primary objects in view the invention consists of the devices and parts, or their equivalents, as hereinafter set forth.

In the accompanying drawings, Figure 1 is an elevation of our improved oil-cup. Fig. 2 is a longitudinal sectional view thereof, and Fig. 3 is a plan view with the cap or cover removed.

Like numerals of reference denote like parts throughout the several views.

Referring to the drawings, the numeral 4 indicates a cylindrical cup which is provided at one end with a projecting tubular stem 5, said stem being threaded exteriorly to adapt it to fit a threaded opening in the hub of the pulley. (Not shown.) The opposite end of the cup is provided with exterior threads, which are adapted to be engaged by the threads of an annular flange extending from a cap or cover 6.

The numeral 7 indicates a hollow ball or globe, which is arranged within the cup. This ball has projecting therefrom a tube 8. One end of the tube forms a valve-seat, while the opposite end is threaded to engage an enlarged threaded portion of the bore of the stem 5. The ball is provided, at equidistant points apart, circumferentially, and nearer the upper

end of the ball, with openings 9. The top of the ball is provided with a threaded opening 10, which a screw 11 engages, the diameter of said screw being such that a considerable space or chamber is left for the accommodation of the lubricant entering the hollow ball. This screw is tubular throughout almost its entire length to receive the stem 12 of a conical gravity-valve 13, which valve is normally seated, as shown in Fig. 2, to close the open end of the tube 8.

In operation the cup or cover is first removed and the cup is filled with the lubricating-oil to a point just below the line of the openings 9. The cap is then readjusted to place. Now, as the machinery carrying the cup revolves, say, in a direction to cause said cup to turn from left to right, it is obvious that centrifugal force will cause the oil to fly toward the cap or cover 6. As this cap or cover offers a resistance to the further movement of the oil in that direction, there is necessarily a reflex action which forces oil through the openings 9 into the interior of the globe and down the curved walls of the globe and into the tube 8, which tube is open by reason of the valve having been thrown outwardly from its seat by the centrifugal force. The oil which thus gathers in the tube 8 will, when the part to which the cup is attached slows down, feed to the bearing to be lubricated.

The globular form of the part 7 is preferable, inasmuch as it admits of the oil spreading more evenly over the top thereof and thereby freely passing through the openings 9, when the oil is forced backward by reflex action, and at the same time the curved inner walls tend to better guide the oil to the tube 8.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, of a cup provided with an outlet-opening, and adapted to be connected to, to rotate with, and to lubricate revolving machinery, a hollow ball or globe within the upper portion of the cup, said ball or globe provided with a valve opening at its lower end, and an opening or openings in its top, a tubu-

lar guide extending inwardly into the hollow  
ball or globe, a tube leading from the outlet-  
opening of the cup to the valve-opening of the  
ball or globe, and a valve within the ball or  
5 globe provided with a stem extending into the  
tubular guide, said valve adapted to be nor-  
mally seated against the valve-opening of the  
globe, and to fly away from the opening by cen-  
trifugal force when the cup is revolved.

In testimony whereof we affix our signa- to  
tures in presence of two witnesses.

JOHN PETRUS.  
FRANZ KOSZL.  
WILHELM HEGENSCHIEDT.

Witnesses:

ARTHUR L. MORSELL,  
ANNA V. FAUST.