

No. 746,243.

PATENTED DEC. 8, 1903.

R. BAGGALEY.  
JOURNAL LUBRICATING DEVICE.

APPLICATION FILED FEB. 24, 1903.

NO MODEL.

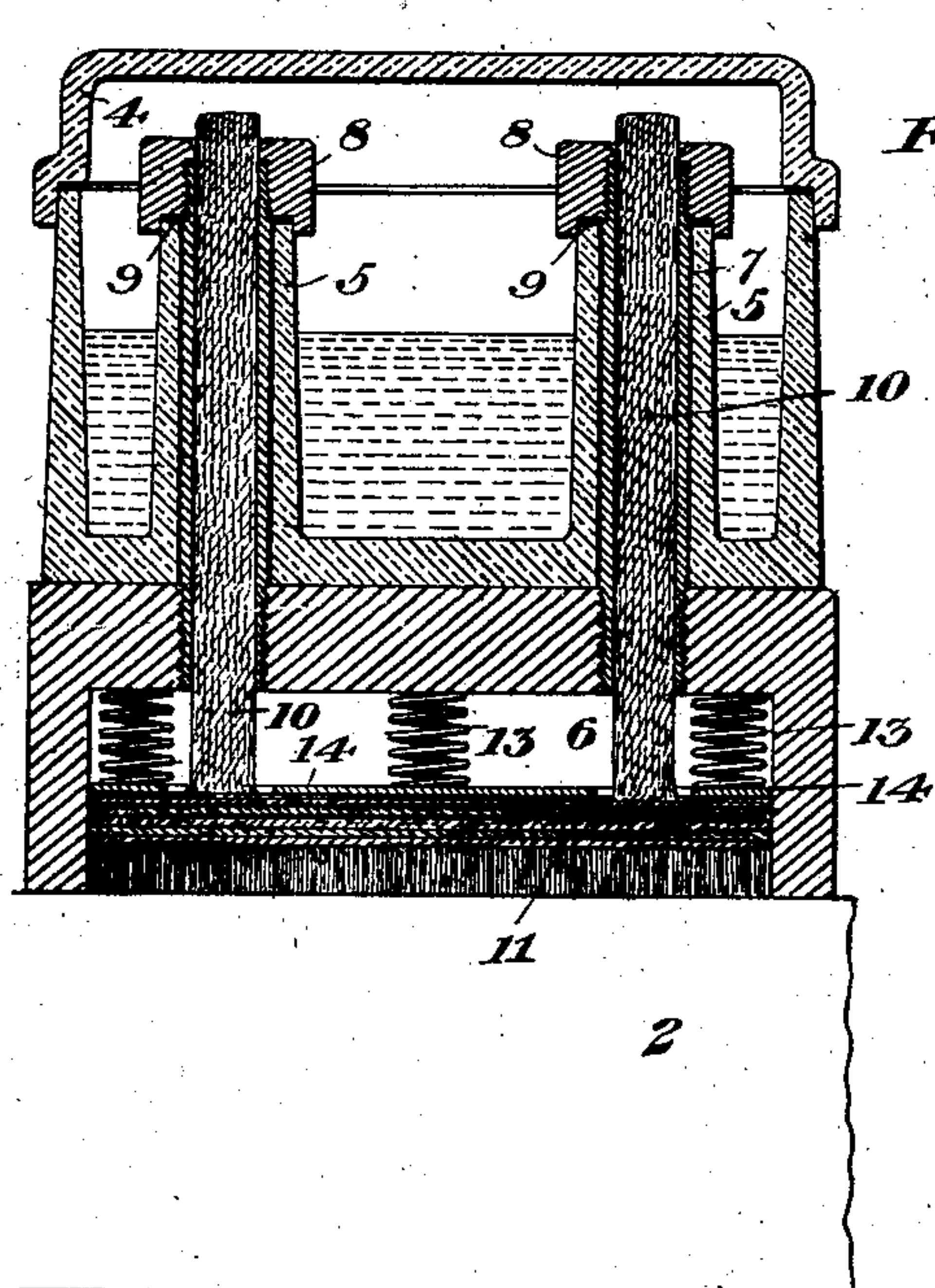


Fig. 2.

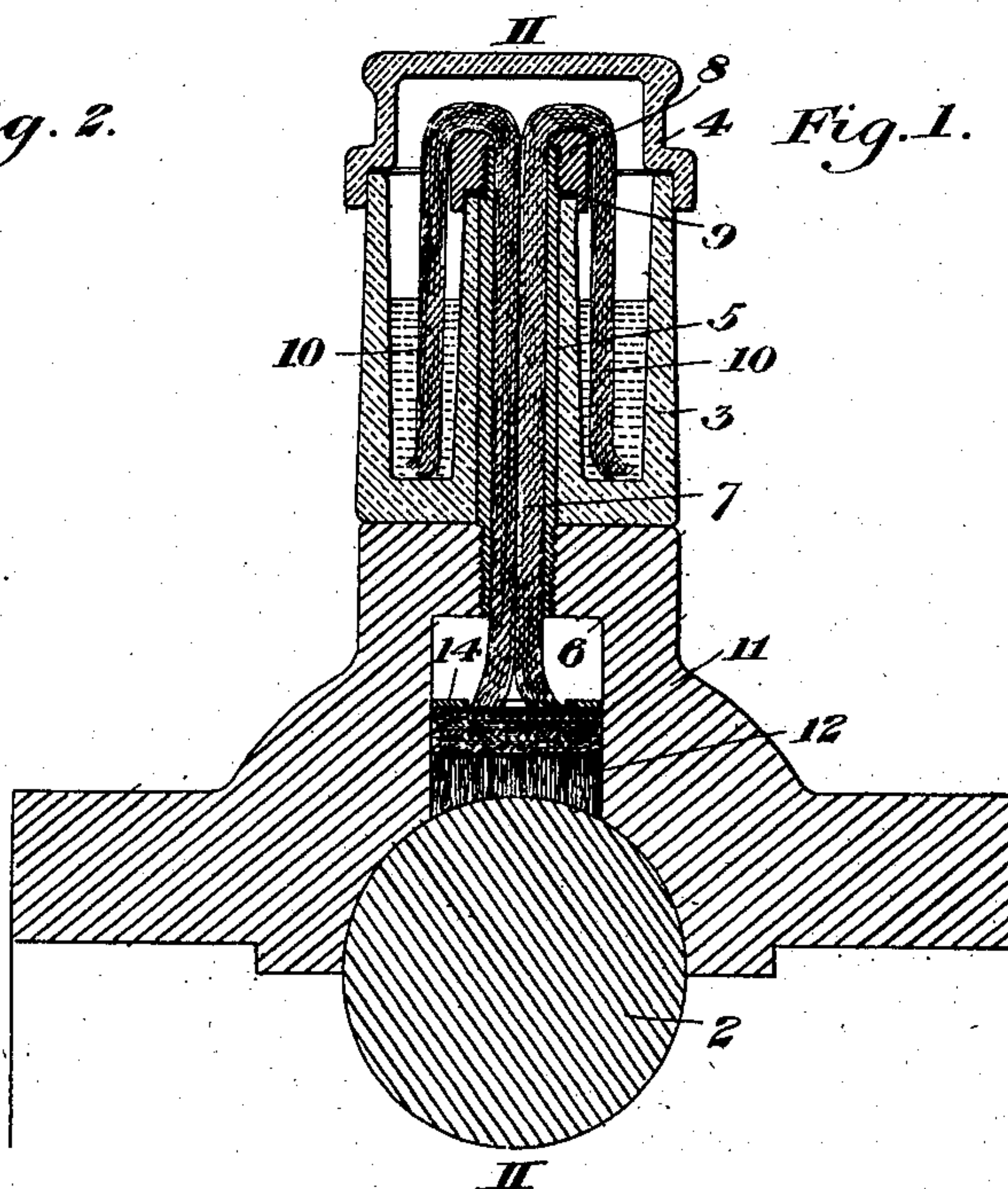


Fig. 1.

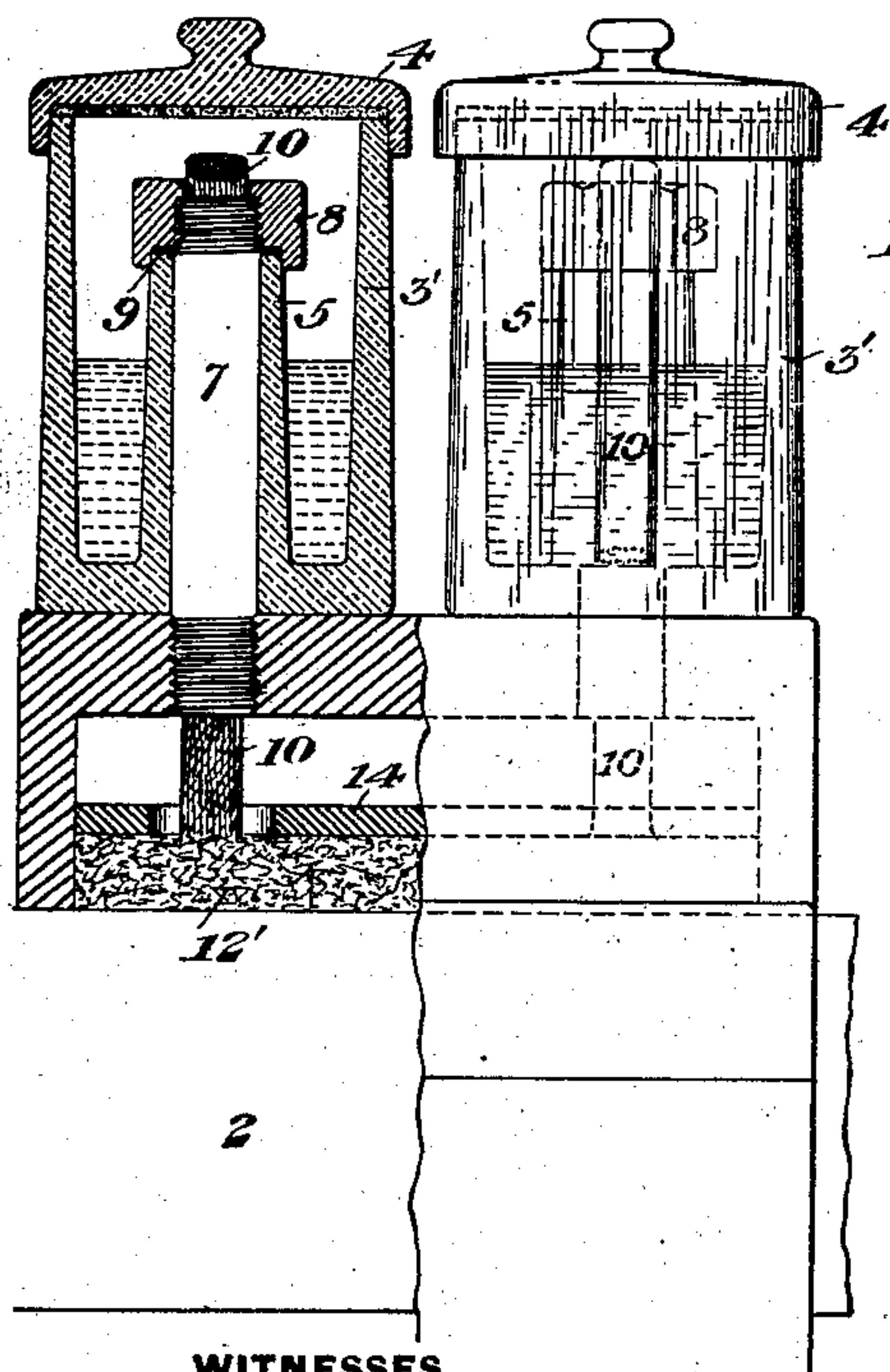


Fig. 4.

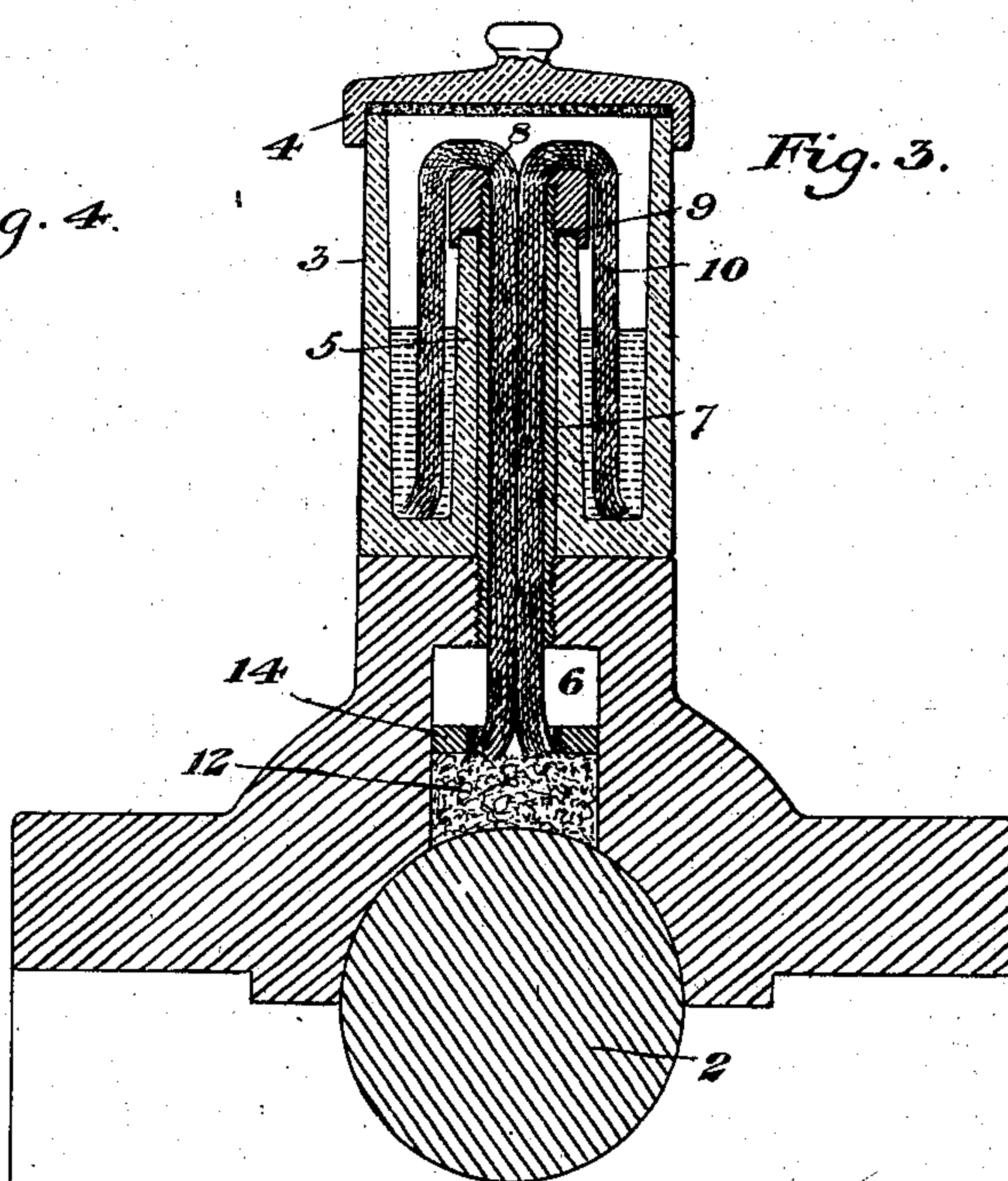


Fig. 3.

WITNESSES

E. W. Lindquist.  
L. A. Connor.

INVENTOR

Ralph Baggageley



## UNITED STATES PATENT OFFICE.

RALPH BAGGALEY, OF PITTSBURG, PENNSYLVANIA.

## JOURNAL-LUBRICATING DEVICE.

SPECIFICATION forming part of Letters Patent No. 746,243, dated December 8, 1903.

Application filed February 24, 1903. Serial No. 144,658. (No model.)

*To all whom it may concern:*

Be it known that I, RALPH BAGGALEY, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Journal-Lubricating Device, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows in vertical cross-section a journal-bearing provided with my lubricating device. Fig. 2 is a vertical section on the line II II of Fig. 1. Fig. 3 is a view similar to Fig. 1, showing my device modified. Fig. 4 is a side elevation of Fig. 3, partly in vertical central section.

My invention is designed to provide an efficient lubricating device in which dust and grit are excluded from the oil-cup and from the journals and in which the oil is supplied continuously and evenly.

I use cotton as the capillary elevator for the lubricant and arrange it so that it will deliver the lubricant by gravity onto a woolen brush or pad placed in the journal so as to deliver a continuous and adequate supply of clean oil over the entire area of the revolving shaft.

I have found by experience that when I place cotton brushes or pads or waste in contact with a revolving shaft, particularly a rapidly-revolving shaft, the friction has the effect of charring the cotton and converting the fiber practically into a black charcoal. I have found that wool is not charred in this manner; but it is not nearly so good a capillary elevator for the lubricant as cotton fiber. Hence in order to produce a perfect device I utilize cotton fiber as my elevator and a woolen brush or pad or mat or a body of waste of wool as my distributor for the lubricant over the area of the shaft.

Referring to Figs. 1 and 2 of the drawings, 2 represents the journal which is to be lubricated. 3 is an oil-cup, which is adapted to be tightly sealed by a cap 4, and 5 5 are tubes which extend upwardly within the oil-cup 3 and communicate at the lower end with a chamber 6 adjacent to the journal. A bushing 7 is fitted within each of the tubes and is screwed to the walls of the chamber 6, and at

its upper end it is fitted with a cap or nut 8, which is screwed on the bushing and bears upon a gasket 9 at the upper end of the tube 5. 10 10 are cotton wicks which extend from the body of oil in the cup 3 upwardly and thence down through the bushing 7 into the chamber 6, where they rest upon a body of cotton fabric or waste 11, beneath which is a body of woolen fiber or waste 12 in contact with the journal. The fibrous material 11 and 12 is held yieldingly upon the journal by springs 13 and an interposed pressure-plate 14. The cup 3 having been charged with oil, as shown, the oil is elevated by the capillary action of the wicks to the top of the tubes 5 and thence is carried by the wicks by the joint action of gravity and capillary attraction downwardly through the tubes 5 and is discharged upon the fibrous material 11 and 12, by which it is evenly distributed to the journal. The supply of oil is thus continuous, and as it is delivered by the wicks it carries no impurities with it. The cotton wicks, as above stated, deliver the oil with sufficient freedom, and it is applied by the woolen fiber 12 without charring or destruction of the latter. The oil-cups 3 may be made of glass, so that the quantity of oil therein may be readily observed, and so long as the oil remains in the cup the lubricating action continues automatically and without need of attention.

In Figs. 3 and 4 I show a modified construction of my device, in which I employ two oil-cups 3 3', each having an oil-tube 5 and a bushing 7, by which a continuous passage is afforded for the wicks. In these figures I show a body of woolen waste 12', upon which the cotton wicks discharge directly and which is held in contact with the journal by a plate 14, acting not by springs, but by gravity.

My device may be modified in various ways by those skilled in the art without departing from my invention, since

What I claim is—

1. A journal-lubricating device comprising an oil-cup, a tube therein, a bushing extending upwardly within the tube and adapted to contain a wick, and a cap on the bushing adapted to hold it; substantially as described.
2. A journal-lubricating device comprising

an oil-cup, a tube extending from the journal  
upwardly within the cup, a body of animal  
fiber on the journal, a plate by which it is held  
thereto, and a wick of vegetable fiber extend-  
5 ing upwardly from the oil in the cup and down-  
wardly through the tube to the body of ani-  
mal fiber; substantially as described.

In testimony whereof I have hereunto set  
my hand.

RALPH BAGGALEY.

Witnesses:

GEO. B. BLEMING,  
N. M. GRIFFIN.