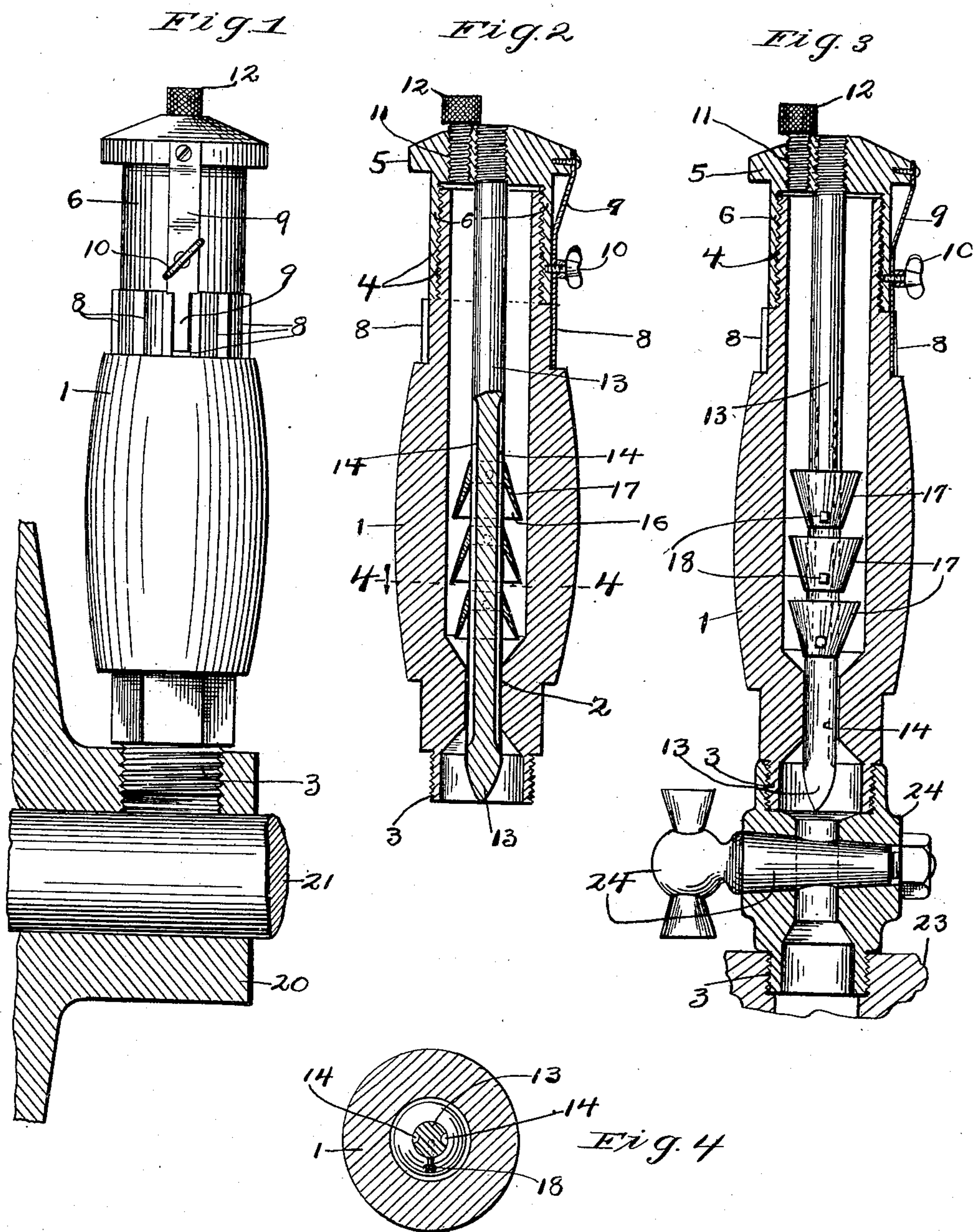


No. 890,691.

PATENTED JUNE 16, 1908.

C. D. McCLINTOCK.
OILING DEVICE.
APPLICATION FILED JULY 19, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES D. McCLINTOCK, OF CLEVELAND, OHIO.

OILING DEVICE.

No. 890,691.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed July 19, 1907. Serial No. 384,553.

To all whom it may concern:

Be it known that I, CHARLES D. McCLINTOCK, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Oiling Devices; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

This invention relates to a new and useful improvement in oiling devices.

The object of this invention is to provide a device which will be simple in construction and which can be readily and permanently adjusted so as to secure an even continuous flow of the oil therefrom.

A further object of my invention is to provide a device of this character especially adapted for use where an opposing force tends to drive the oil away from the outlet of the device.

With these objects in view my invention consists in providing an oil receptacle or cup arranged to be mounted on or near the portion of the machine which is to be lubricated, means for adjusting the flow of oil from the cup, means for permanently securing the adjustment and means arranged within the cup for lessening the effect on the oil of any force tending to drive the oil back from the outlet of the mouth of the cup.

My invention further consists in the features of construction and combination of parts as described in the specification, pointed out in the claims and illustrated in the accompanying drawings.

In the accompanying drawings Figure 1 is a view in elevation of a device embodying my invention mounted on the hub of a pulley. Fig. 2 is a central section of the same detached. Fig. 3 is a central section of the same device as arranged for use on a steam cylinder. Fig. 4 is a section on line 4—4, Fig. 2.

Again referring to the drawings 1 represents the oil receptacle or cup which is approximately cylindrical in form except at the mouth or outlet where it is reduced in size and an annular vertical valve seat 2 is formed. An annular screw-threaded flange 3 is formed on the lower end of the cup 1 and is adapted to screw into the oil hole in the part of the machine on which the cup is mounted. The wall of the cup is reduced in thickness near

its upper end and thereon is formed an exterior screw-thread 4. A cap 5 is provided with a screw-threaded portion 6 corresponding to the screw-thread on the upper part of the cup. The screw-threaded portion 6 of the cap is made longer than on an ordinary cap, because the adjustment of the flow of oil is secured by screwing the cap up and down on the cup as will hereinafter appear. The exterior surface of the cup below the cap is provided with a series of serrations 8 and on the cap is secured a resilient strip or tongue 9 which extends below the cap and which when pressed in is adapted to engage with the serrations 8 on the cup. A thumb screw 10 extends through the tongue 9 and is arranged to screw into the side of the cap so that by tightening the screw 10 the tongue 9 can be caused to engage with the serrations 8 on the cup, thereby locking the cap against movement, or by loosening the screw the tongue 9 can be freed from the serrations, thereby permitting the cap to be screwed up and down on the cup. In the top of the cap is formed a filling opening 11 which is closed by a stopper 12.

To the center of the cap is secured a valve rod 13 which is preferably tapered at its lower end and extends down through the center of the cup and is of sufficient length to extend down through the valve seat and fits closely therein. In the surface of the rod and extending longitudinally thereof are formed a series of grooves 14 which terminate a short distance above the tapered end of the rod. When the ends of the grooves 14 are in the valve seat no oil will pass out of the cup, but by screwing down on the cap the rod can be advanced until the ends of the grooves extend below the valve seat and the oil will then flow through the grooves and out of the cup. The flow of oil can be very delicately adjusted, and when the proper adjustment is once secured the cap can be locked against movement in the manner heretofore explained and the adjustment is thus permanently secured.

On the valve rod, within the cup, are arranged a series of pockets 16 which are preferably formed by securing on the rod a series of hollow cones 17 by means of screws which permit the cones to be adjusted up and down on the valve rod and also permit the cones to be removed and reversed if desired.

In Fig. 1 the oiling device is shown mounted

ed on the hub of a pulley 20 which is rotatably mounted on a shaft 21 and, as it is well known that when an oiler is so mounted the centrifugal force caused by the rotation of the pulley acts to drive the oil to the top of the cup and away from the mouth thereof therefore when my oiler is thus employed the cones are arranged so that the mouths of the pockets are towards the mouth or outlet of the oiler, as shown in Fig. 2. The pockets serve to retain the oil in proximity to the valve rod and a continuous flow of oil is thereby secured.

In Fig. 3 the oiler is shown employed on a steam cylinder 23 and a valve cock 24 is preferably arranged between the oiler and the cylinder. When the oiler is used for lubricating a steam cylinder the cones are arranged so that the mouths of the pockets are toward the top of the cup, as shown in Fig. 3. The purpose of the cones when reversed is the same as before described, that is to form pockets for holding the oil in proximity to the stem, and as in this construction the oil cup will be used in a vertical position and will always be stationary the cones will naturally form better cups when arranged in their inverted position.

In describing my device I have referred to it as an oil feeding device, but it can be used for feeding any fluid.

What I claim is,—

1. In a device of the character indicated a cup having an outlet at its lower end, a valve seat arranged in said outlet, a valve rod adjustable relatively to said valve seat and a series of hollow cones mounted on said valve rod.

2. In a device of the character indicated a cup having an outlet at its lower end, a valve seat arranged in said outlet, a cap arranged to screw onto said cup, a valve rod secured to said cap and arranged to extend through said valve seat, said valve rod being provided with a series of grooves which terminate above the end of said rod and means for locking said cap against rotation.

3. In a device of the character indicated a cup having an outlet at its lower end, a valve seat arranged in said outlet, a cap arranged to screw onto the top of said cup and a valve

rod secured to said cap, said valve rod being provided with a series of pockets.

4. In a device of the character indicated a cup having an outlet at its lower end, a valve seat arranged in said outlet, a cap arranged to screw on the top of said cup and a valve rod secured to said cap and arranged to extend down into said valve seat, said valve rod being provided with a series of grooves which terminate above the end of said rod and a series of pockets.

5. In a device of the character indicated a cup having an outlet at its lower end, a valve seat arranged in said outlet, a cap arranged to screw on the top of said cup, a valve rod secured to said cap and arranged to extend through said valve seat and a series of cones adjustably mounted on said valve rod.

6. In a device of the character indicated, the combination of a closed cup having an outlet near its lower end, a valve rod arranged in said cup to control the passage of fluid through said outlet and a hollow cone arranged on said rod, the walls of said cone flaring outwardly in proximity to the walls of said cup to retard the movement of oil in said cup.

7. In a device of the character indicated the combination of a closed cup having an outlet near its lower end, a valve rod arranged in said cup so as to control the passage of fluid through said outlet and a series of hollow cones arranged on said rod the walls of said cones flaring outwardly in proximity to the walls of said cup to retard the movement of oil in said cup.

8. In a device of the character indicated the combination of a closed cup having an outlet near its lower end, a valve rod arranged in said cup to control the passage of fluid through said outlet and a series of hollow cones reversibly mounted on said valve rod.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

CHARLES D. McCLINTOCK.

Witnesses:

VICTOR C. LYNCH,
ELEANOR C. McCLINTOCK.