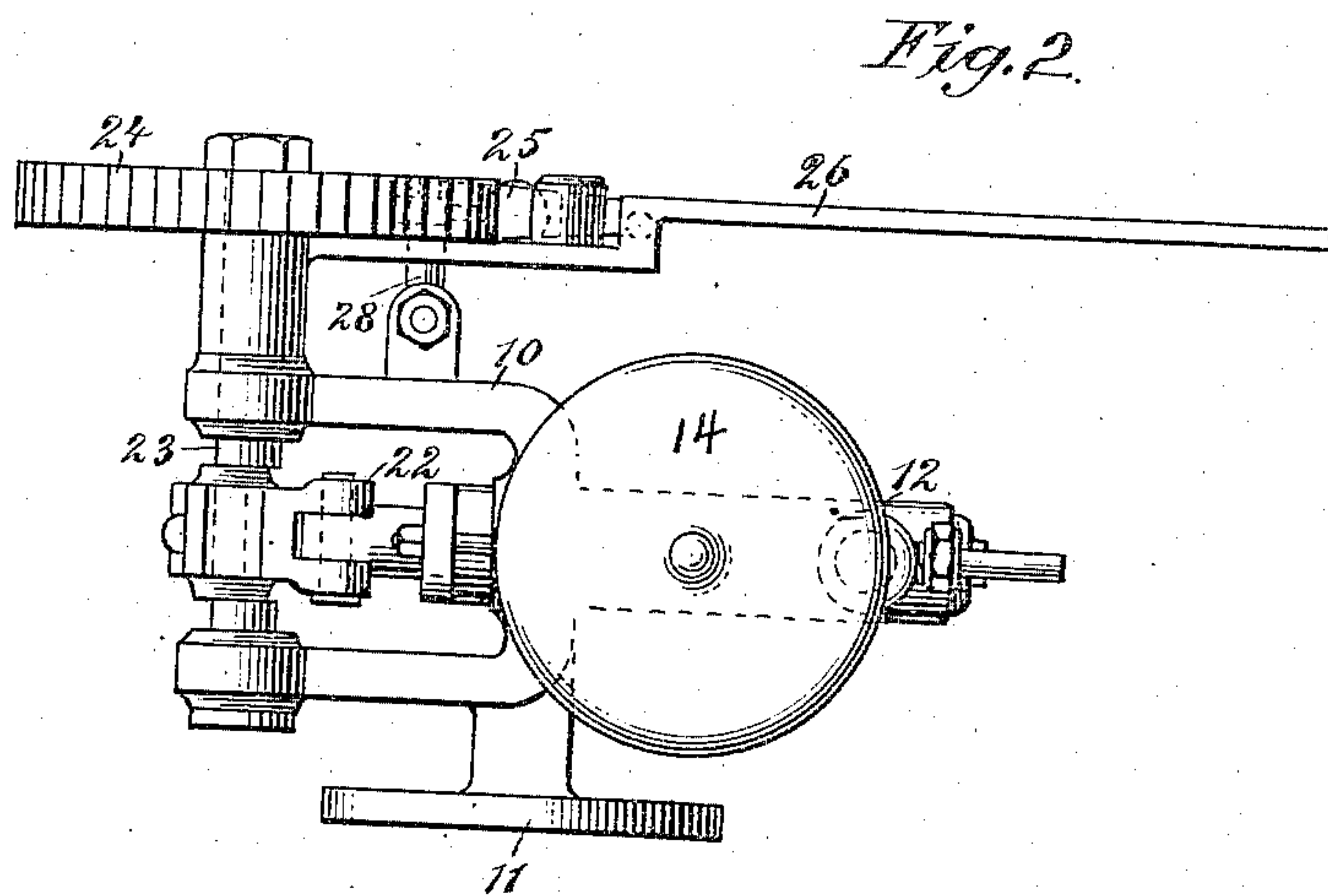
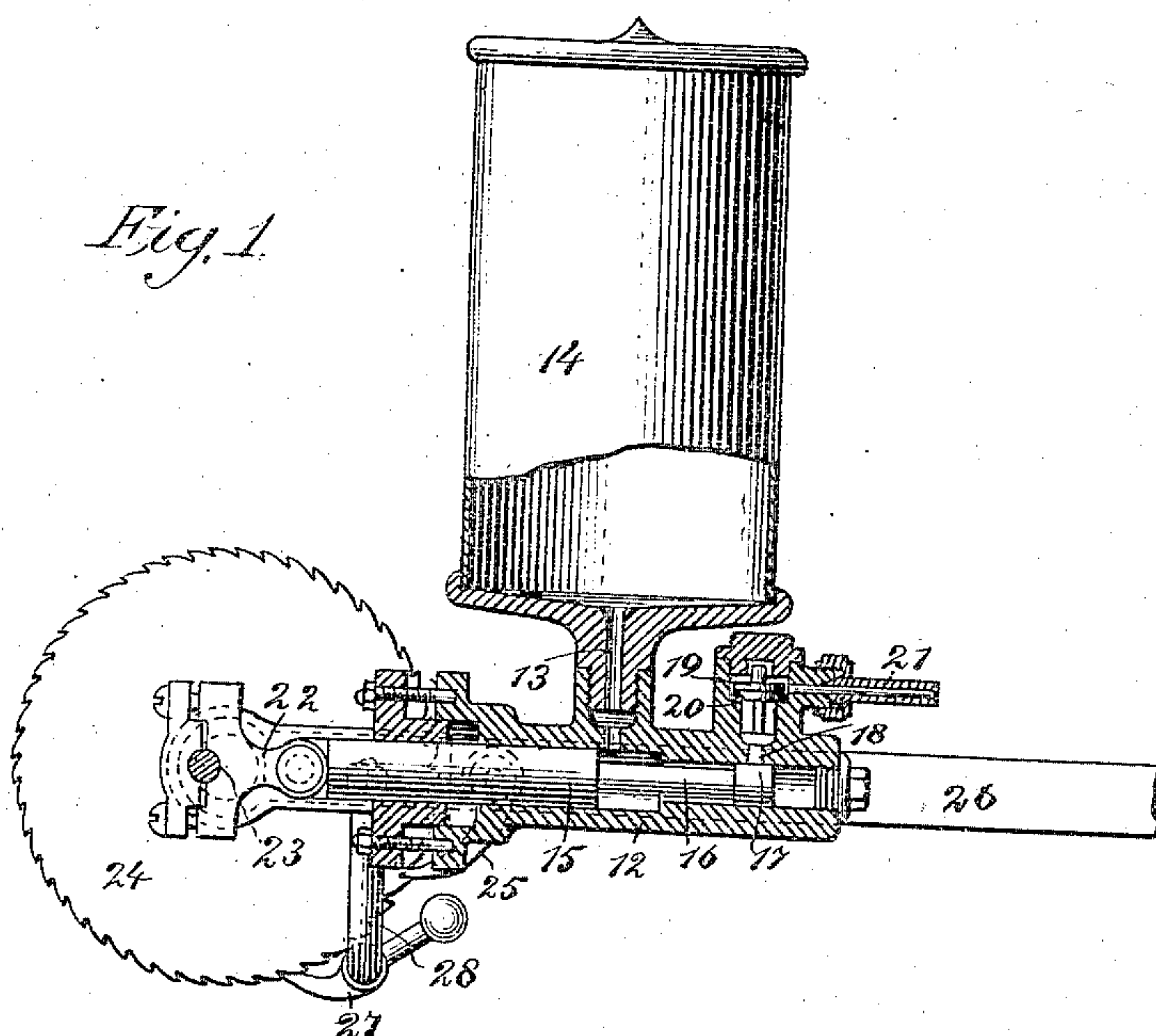


(No Model.)

K. A. JAKOBSON.  
LUBRICATOR.

No. 459,349.

Patented Sept. 8, 1891.



WITNESSES:

*J. H. Clark,*  
*C. Sedgwick*

INVENTOR:

*K. A. Jakobson*  
BY *Munn & Co.*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

KARL ALBART JAKOBSON, OF CHRISTIANIA, ASSIGNOR TO HIMSELF AND  
THORVALD RÖSTAD, OF MOSS, NORWAY.

## LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 459,349, dated September 8, 1891.

Application filed April 6, 1891. Serial No. 387,819. (No model.)

*To all whom it may concern:*

Be it known that I, KARL ALBART JAKOBSON, manufacturer, a subject of the King of Norway, and a resident of Christiania, Norway, have invented certain new and useful Improvements in Lubricators, of which the following is a specification.

My invention relates to improvements in lubricators; and the object of my invention is to produce a lubricator of simple construction, which may be conveniently connected with any common machinery and which will thoroughly lubricate all the parts of the machinery.

To this end my invention consists in a lubricator constructed substantially as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a broken vertical section of the lubricator, and Fig. 2 is a plan view of the same.

The frame 10 is provided on one side with a flange 11, which flange is adapted to be secured to any convenient support, or it may be attached to some convenient part of the machine which is to be oiled, and the frame has a horizontal cylinder 12 formed therein, which cylinder is of two diameters on the inside. The larger portion of the cylinder connects by a channel 13 with a reservoir 14, which reservoir is mounted upon a convenient support, and a plunger 15 is held to slide in the cylinder, the plunger having its inner end 16 reduced to enter the smaller portion of the cylinder, and this reduced portion is enlarged at the end, as shown at 17, to form a slide that has the function of a valve.

Opening upward from the smaller end of the cylinder is a canal 18, which connects through a valve 19 with a tube 21, and this tube may be connected by suitable tubes or pipes with any desired part of the machinery. The valve 19 is a common gravity-valve, and has a rubber packing 20 on the under side. The plunger 15 is moved by a

crank 22, which crank is pivotally connected with the outer end of the plunger and is eccentrically pivoted at its outer end to a shaft 23, which shaft carries a ratchet-wheel 24 at one end, and the ratchet-wheel is operated by means of a pawl 25 and pitman 26, the pawl being carried by the pitman, and if the pitman is connected with the machinery it will impart a step-by-step movement to the ratchet-wheel in a common and well-known manner. A gravity-pawl 27 is pivoted on a support 28, and the pawl engages the teeth of the ratchet-wheel and prevents it from moving in the wrong direction.

The operation of the lubricator is as follows: As the ratchet-wheel revolves the crank 22 will be actuated and will move the plunger 15 slowly back and forth; and it will be noticed that when the inner end of the plunger is below the channel 13 the canal 18 will be opened, and when the plunger 15 is withdrawn from beneath the channel 13 the slide 17 will close the canal 18. It will thus be seen that the plunger serves as a pump, and as it is moved the oil with which the reservoir 14 is filled will be sucked down into the cylinder and will be forced outward through the canal 18, the valve 19, and tube 21, to be distributed in the manner described. When the oil is forced from the larger portion of the cylinder into the smaller portion, it will be somewhat compressed, and the force of the larger plunger will cause it to flow freely through the distributing tube and pipes. If a continuous feed of oil is desired, the apparatus may be duplicated, two plungers and cylinders being used, and the plungers may be connected by a bent arm with its members arranged at an angle of one hundred and eighty degrees, so that when one plunger is pushed inward the other will be moved outward.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A lubricator comprising a cylinder of two diameters, a reservoir connected with the larger portion of the cylinder, a valve-controlled opening in the smaller portion of the

cylinder, and a plunger of two diameters held to slide in the cylinder, the smaller portion of the plunger carrying a slide-valve to fit the smaller portion of the cylinder, substantially as described.

5 In testimony that I claim the foregoing as my invention I have signed my name, in pres-

ence of two witnesses, this 22d day of August, 1890.

KARL ALBART JAKOBSON.

Witnesses:

ADAM SMITH,

AXEL GOTTFRED GRÖNN LAHN.