

No. 697,700

Patented Apr. 15, 1902.

A. M. ALDEN.

OILER.

(Application filed Dec. 18, 1901.)

(No Model.)

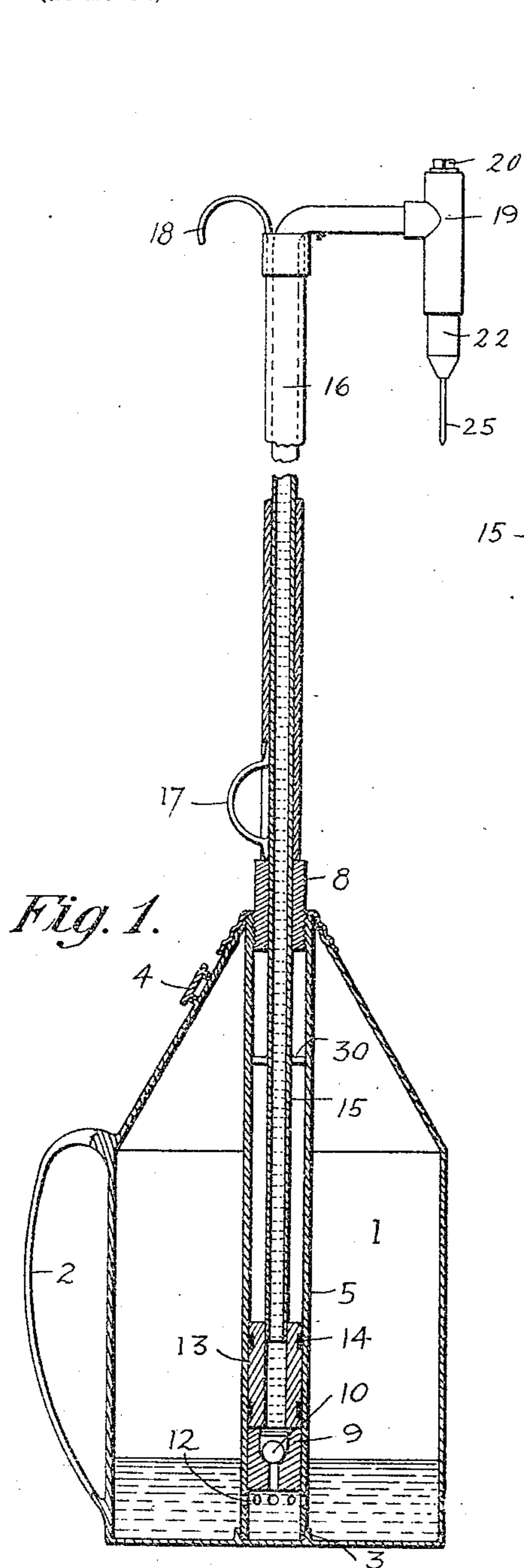


Fig. 1.

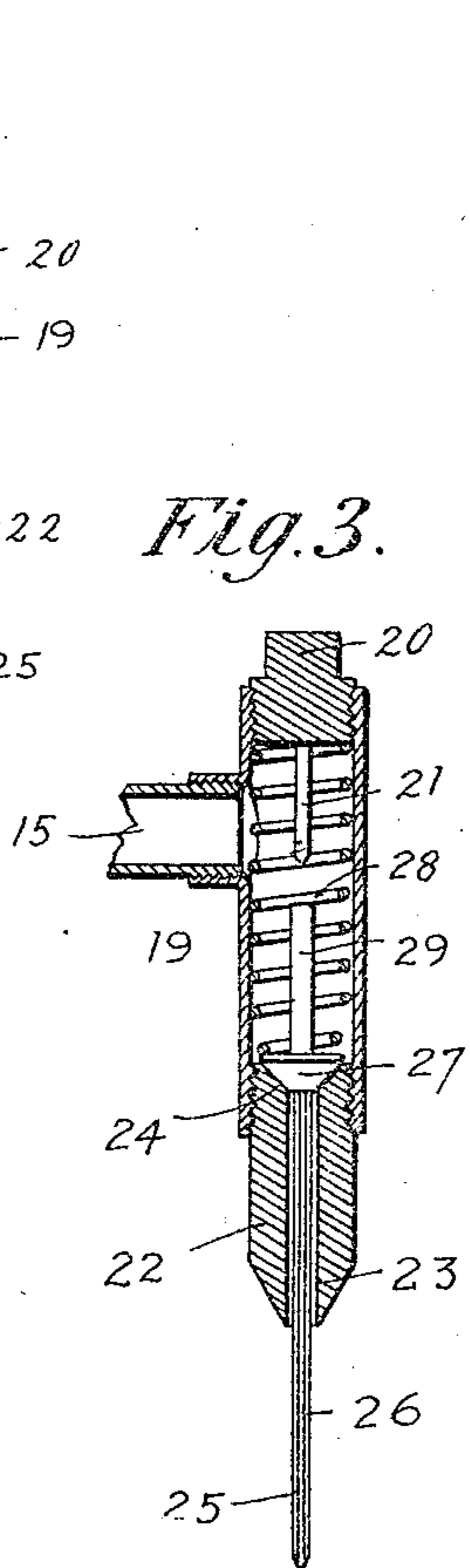


Fig. 3.

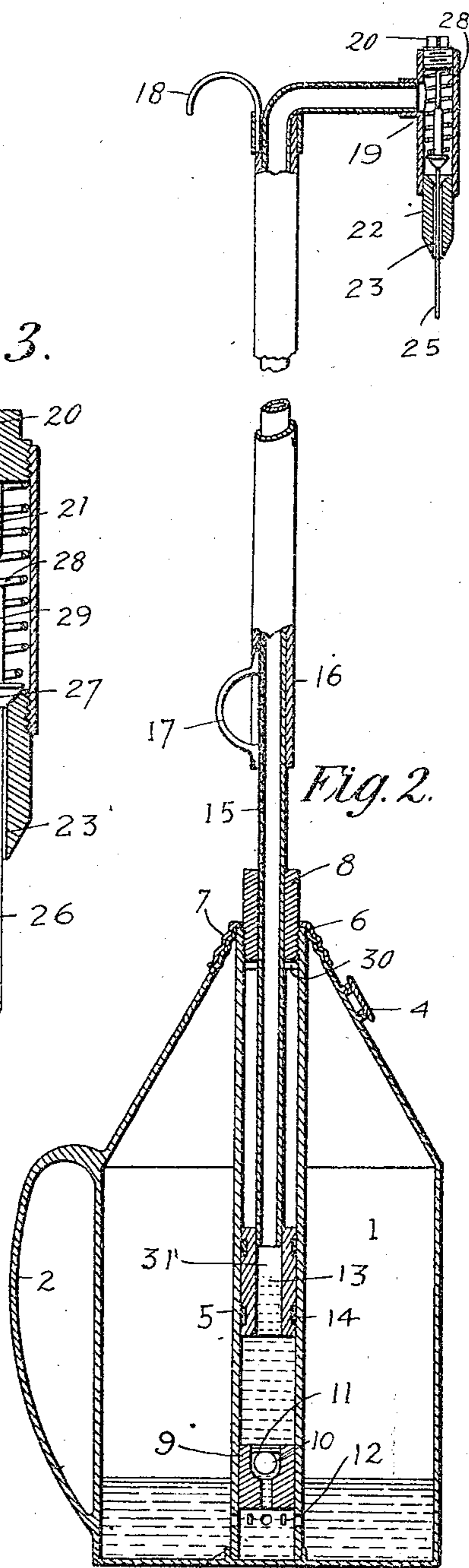


Fig. 2.

Witnesses:
Arthur M. Alden
John L. Kindt

Inventor
Arthur M. Alden.
By his Atty. John L. Kindt.

UNITED STATES PATENT OFFICE.

ARTHUR M. ALDEN, OF WAUKEGAN, ILLINOIS.

OILER.

SPECIFICATION forming part of Letters Patent No. 697,700, dated April 15, 1902.

Application filed December 18, 1901. Serial No. 86,471. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR M. ALDEN, a citizen of the United States, residing at No. 117 Mill street, in the city of Waukegan, county of Lake, and State of Illinois, have invented certain new and useful Improvements in Oilers, of which the following is a specification.

The object of this invention is to provide an oiler whereby oil may be applied to the journal-boxes of line and counter shafts, gearings, pulleys, or other machinery located considerable distance above the floor without requiring the operator to use a step-ladder or foot-stool.

A further object of the invention is to provide means whereby the oil from the can may be readily conveyed through the spout and the flow of the oil quickly cut off when the operation of oiling the shaftings has been accomplished.

The invention consists of the novel details of construction hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a cross-sectional view of my improved oiler, showing the upper portion in elevation. Fig. 2 is a cross-section, partly in elevation, with portions broken away; and Fig. 3 is a sectional detail view of the pin-valve.

The can 1 is of any suitable size, provided with a handle 2 and having a circular flange 3, rigidly secured in the bottom thereof and which receives oil through the opening 4. The cylinder 5 is adapted to be placed through the opening 6, the lower end of which engages the circular flange 3 in the bottom of the can 1. To the upper end of the cylinder 5 is rigidly secured the screw-threaded cap 7, which engages the threads around the opening 6 of the can 1. This end of the cylinder 5 is also provided with internal screw-threads and adapted to receive the end of the collar 8. The collar 8 is for the purpose of strengthening the opening 6 of the can 1, and it also acts as a stuffing-box.

A pin 30 passes through the pipe 15 and is for the purpose of allowing the piston 13 to be moved a certain distance upward by reason of the pin coming in contact with the collar 8. Rigidly secured in the lower end of the cylinder 5 is a ball-valve 9, the ball 10 being held in position by means of the pin 11. The ap-

ertures 12 are for the purpose of allowing oil to flow into the cylinder 5.

A piston-head 13, provided with the grooves 14, in which is placed any suitable packing material, is adapted to operate in the cylinder 5 above the ball-valve 9. It is provided with a vertical opening 31 and has internal screw-threads in the upper end thereof, which receives the lower end of the pipe 15. The pipe 15 extends upward out of the cylinder 5 and through the collar 8 and is bent to the position as shown in Fig. 2.

The upper portion of the pipe 15 is provided with a wood covering or casing 16. To this covering or casing is rigidly secured the handle 17, and to the upper end of said covering or casing 16 is rigidly secured the handle 18, by which the oiler may be hung up when not in use. The portion of the pipe bent at right angles is provided with external screw-threads and is adapted to be secured to the T-joint 19. The upper end of the T-joint 19 is internally screw-threaded and is adapted to receive the plug 20, the lower end of which terminates in the projection 21. The lower end of the T-joint 19 is also provided with internal screw-threads and adapted to receive the external screw-threads on the upper end of the valve-seat portion 22. This valve-seat portion 22 is provided with a vertical opening 23, which terminates in the valve-seat 24. The stem portion of the pin-valve 25 is provided with the grooves 26 and extends through the vertical opening 23 in the valve-seat portion 22, with the valve 27 resting in the valve-seat 24. The valve 27 is normally held in the valve-seat 24 by means of the spiral spring 28.

The upper end of the pin-valve 25 terminates in the projection 29. The projections 21 and 29 are for the purpose of allowing the pin-valve 25 to be pushed upward until the projections 21 and 29 meet, as clearly shown in Fig. 2.

The operation of this oiler is as follows: The operator grasps the handle 17 in the left hand and the handle 2 in the right hand. The pin-valve 25 is then inserted into the oil-cup and the can 1 allowed to move downward. By this operation it will be seen that the piston-head 13 moves upward. Then by pulling down gently with the left hand the pin-valve

25 will open. By moving the can 1 up the ball-valve 9 closes, as shown in Fig. 1, and the oil is forced up through the pipe 15, and by lowering the can 1 the ball-valve 9 opens, as shown in Fig. 2, and by the action of the piston-head 13 moving upward oil is drawn into the cylinder 5. Thus it will be readily apparent that after the pin-valve 25 has been inserted into the oil-cup and pulled open the operation of moving the can 1 up and down once or twice will cause a sufficient quantity of oil to be conveyed from the can to the oil-cup to lubricate the different parts of machinery desired to be oiled.

15 Slight changes can of course be made in the general form and arrangement of the different parts described without departing from the spirit and scope of my invention, and hence I do not wish to be limited to the exact construction herein set forth; but,

20 Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An oiler, comprising a can, a cylinder adapted to be secured in said can, a ball-valve secured in the lower end of the cylinder, a piston-head provided with a vertical opening adapted to operate in the cylinder above the ball-valve, a pipe secured to the upper end of the piston-head and passing through a col-

lar on the upper end of the cylinder, and adapted to receive a T-joint provided with a pin-valve, substantially as described.

2. An oiler comprising a can, a cylinder adapted to be secured in said can, a ball-valve secured in the lower end of the cylinder, a piston-head provided with a vertical opening adapted to operate in the cylinder, a pipe the lower end of which is secured to the piston-head, and the upper end terminating at right angles and secured to a T-joint, a valve-seat portion provided with a vertical opening secured to the lower end of the T-joint, and having a valve-seat in the upper end thereof, a pin-valve the stem portion of which is provided with a series of grooves, and the upper portion terminating in a pin projection, a screw-threaded plug provided with a lug projection secured in the top of the T-joint, a spiral spring around the pin projection and plug projection normally holding the valve in the valve-seat, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in the presence of two subscribing witnesses.

ARTHUR M. ALDEN.

Witnesses:

JOHN T. JUDGE,
J. DUNNING.