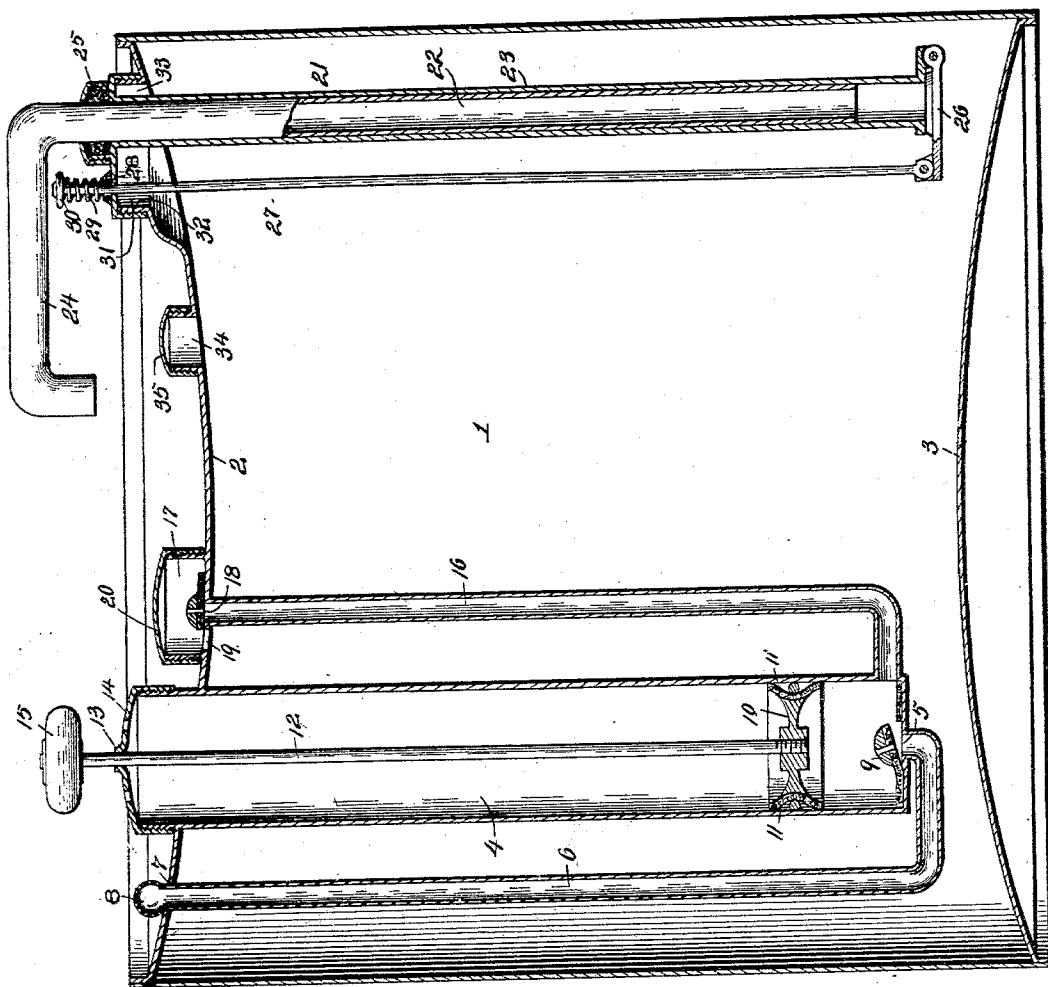


(No Model.)

W. A. DURRIN.
OIL CAN.

No. 556,741.

Patented Mar. 24, 1896.



Inventor

Warren A. Durrin.

Witnesses

Thos. H. Riley
[Signature]

By his Attorneys.

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

WARREN A. DURRIN, OF WOODVILLE, WISCONSIN.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 556,741, dated March 24, 1896.

Application filed January 16, 1895. Serial No. 535,131. (No model.)

To all whom it may concern:

Be it known that I, WARREN A. DURRIN, a citizen of the United States, residing at Woodville, in the county of St. Croix and State of Wisconsin, have invented a new and useful Oil-Can, of which the following is a specification.

My invention relates to an oil-can designed for household use; and the objects in view are to provide a simple and efficient device adapted to be used in filling lamps and similar articles without the necessity of inclining or tipping the can; and, furthermore, to provide means whereby the flow of oil from the can may be regulated with greater accuracy to prevent overflow and similar disadvantages of the ordinary form of can.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawing the figure illustrates a central vertical section of a can constructed in accordance with my invention.

1 designates the can, which may be of cylindrical or other form in cross-section and which is provided with concaved upper and lower heads 2 and 3 to resist internal pressure, and arranged in the can is a cylinder 4, having at its lower end an opening 5 which communicates by means of an air-inlet tube 6 with an opening 7, which is formed in the upper head of the can. This opening 7 is covered by a reticulated cap 8 to prevent the admission of dust or other foreign matter. The opening 5 at the lower end of the cylinder is provided with a valve 9, which opens inwardly or toward the cylinder to allow the admission of air to the latter and prevent the exhaust thereof at this point. Operating in the cylinder is a plunger 10, provided with suitable packing 11 and having a rod 12, which passes through a guide-opening 13 in a removable perforated cap 14, which is threaded upon the upper exterior terminal of the cylinder. Said plunger-rod terminates outside of the can in a knob or handle 15. Communicating with said cylinder near its bottom is an air-supply tube or conveyer 16, which terminates in an air-chamber 17 at the top of the can, the opening by which said pipe com-

municates with the chamber being closed by a valve 18, which opens upwardly to allow air to escape from the supply-tube 16 into the air-chamber. Said chamber communicates with the interior of the oil-can by means of a port 19, and the chamber is provided with a removable cap 20, by which access is given to the interior of the chamber for the purpose of cleaning the same and repairing the valve 18. It will be seen also that the perforated cap 14 at the upper end of the cylinder is removable for the purpose of withdrawing the plunger and thus gaining access to the valve 9.

Located in the oil-can, preferably near one side and parallel with the axis thereof, is an extension oil-outlet pipe 21, consisting of telescoping inner and outer sections, 22 and 23, of which the former terminates at its upper end in a spout 24 and the latter is secured permanently in the can. A stuffing-box 25 is located at the upper end of the fixed or exterior member, 23, of the extension outlet-pipe to prevent leakage around the inner member, 22, and at the same time provide for the longitudinal and rotary adjustment of said member 22, whereby the spout may be arranged in the most desirable position for discharging the contents of the can. The lower end of the stationary member of the outlet-pipe is closed by an inwardly-opening valve 26, to which is pivotally connected the lower end of an operating-rod 27, and said operating-rod extends through a guide 28 in the top of the can and is provided with an actuating-spring 29, by which said valve 26 is normally held closed. The operating-rod terminates at its upper end in a knob 30, which may be pressed to communicate motion to the valve 26, whereby oil is admitted to the outlet-pipe.

The outlet-pipe and operating-rod are connected to and supported by a removable cap 31, threaded upon a flange 32 which surrounds the opening 33 in the top of the can, whereby said parts may be detached from the can to provide for cleaning and repairing the same. The supply-opening 34, which is formed in the top of the can, is provided with a removable cap 35.

This being the construction of the improved oil-can, it will be seen that oil is introduced through the capped opening 34, and when it is desired to discharge oil from the can the

plunger is operated to draw air into the cylinder through the inlet-pipe 6 and exhaust it into the interior of the can through the supply-pipe 16. When a sufficient pressure has been produced in the can, the spout 24 should be adjusted to communicate with the opening in the article to be filled, after which the operating-rod is depressed to open the valve 26. The pressure of air in the oil-can then forces the oil through the extension outlet-pipe, and when the desired quantity has been discharged the release of said operating-rod will be accompanied by the closing of the valve, thus immediately cutting off the discharge of oil. In this way all of the oil in the can may be withdrawn, and as long as the air which is contained in the can above the oil remains in a state of compression no further operation of the pump is necessary.

It will be seen that back flow or escape of either oil or air is prevented by the arrangement of the valves 9 and 18, and in case oil is spilled upon the concave top of the can said can may be inclined to cause the oil to flow through the reticulated cap 8 into the inlet-pipe 6, whereupon the operation of the plunger will discharge the oil into the interior of the can.

It will be understood that in practice various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, I claim—

1. The combination with an oil-can having an outlet-pipe, of force-feed mechanism having a cylinder arranged within the can, a plunger operating in said cylinder and provided with a rod which projects to the exterior of the can, an inlet-pipe communicating with the inner end of the cylinder and provided at its outer end with a reticulated cap, an inwardly-opening valve for controlling the

passage between the inlet-pipe and the cylinder, and a valved supply-pipe communicating at one end with the cylinder and at the other end with the interior of the can, substantially as specified.

2. The combination with an oil-can having an outlet-pipe, of a cylinder arranged vertically in the can and provided at its upper end with a removable perforated cap, a plunger operating in said cylinder and provided with a rod extending beyond said perforated cap, an inlet-pipe communicating with the lower end of the cylinder and provided at its outer end with a reticulated cap, a valve controlling the communicating passage between the inlet-pipe and the cylinder and arranged in the latter whereby it is accessible when the plunger is removed, an air-chamber 17 having a removable cap, and a supply-pipe communicating at one end with the cylinder and at the other end by a valved passage with said air-chamber, the valve being arranged in the chamber and being accessible when the cap thereof is removed, said air-chamber being in communication with the interior of the oil-can, substantially as specified.

3. The combination of an oil-can provided with upper and lower concaved heads, an oil-outlet spout, and force-feed mechanism having a pump provided with an inlet-pipe which terminates in a reticulated cap contiguous to the upper head of the can, and a supply-pipe which is in communication with the interior of the can, said inlet and supply pipes being provided with controlling-valves, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WARREN A. DURRIN.

Witnesses:

J. C. JOHNSON,
A. HANSON.