

No. 679,123.

W. L. HOWLAND.
OIL CAN.

Patented July 23, 1901.

(Application filed Apr. 5, 1901.)

(No Model.)

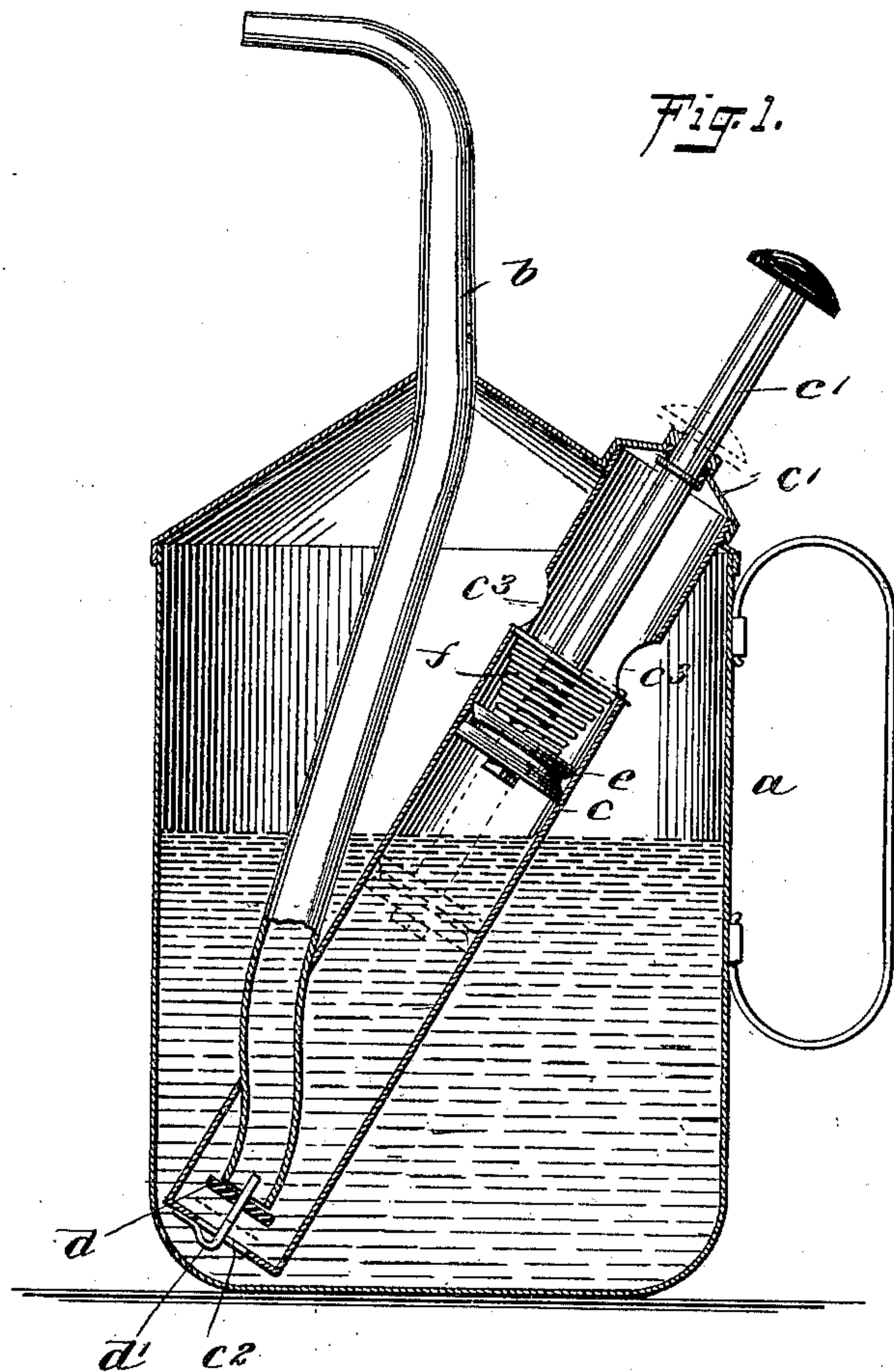


Fig. 2.

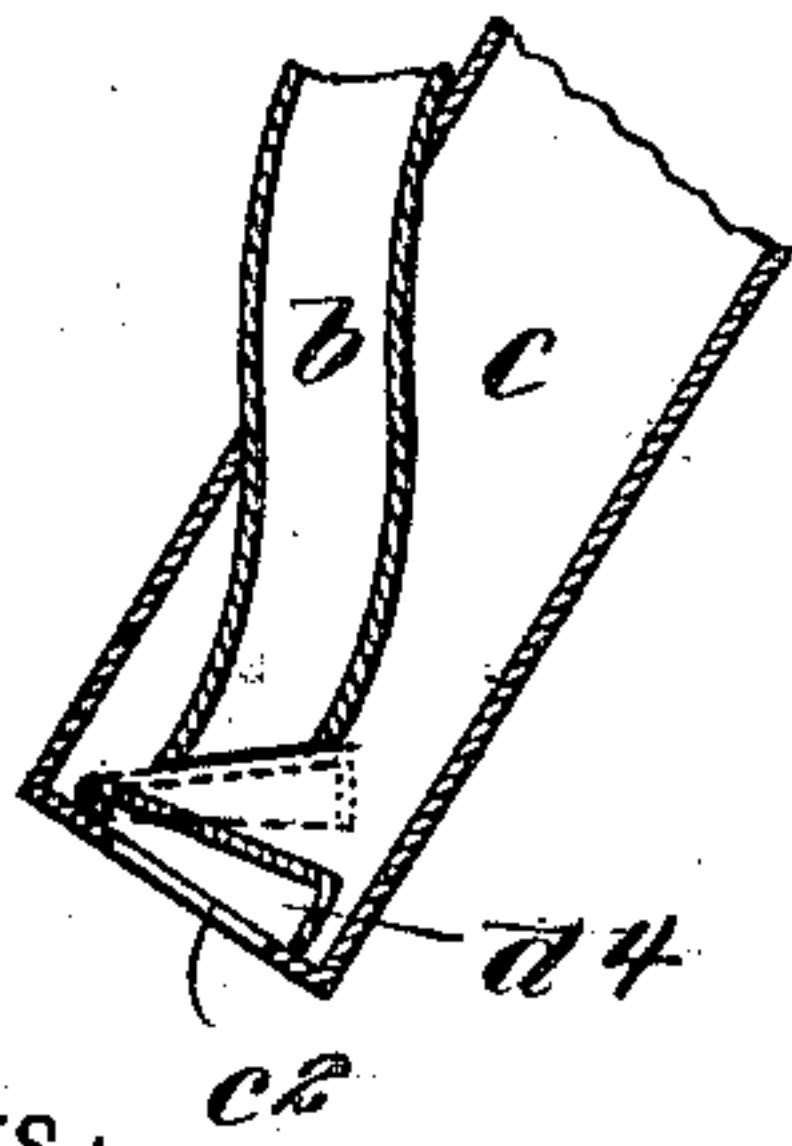


Fig. 3.

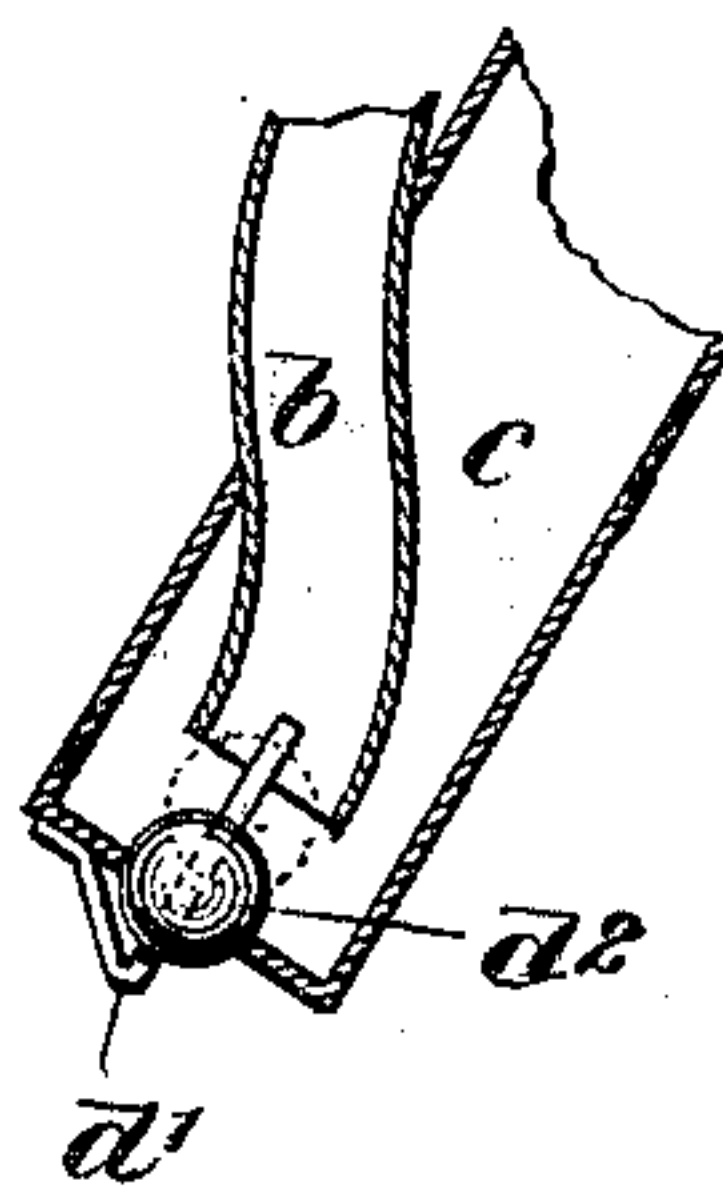
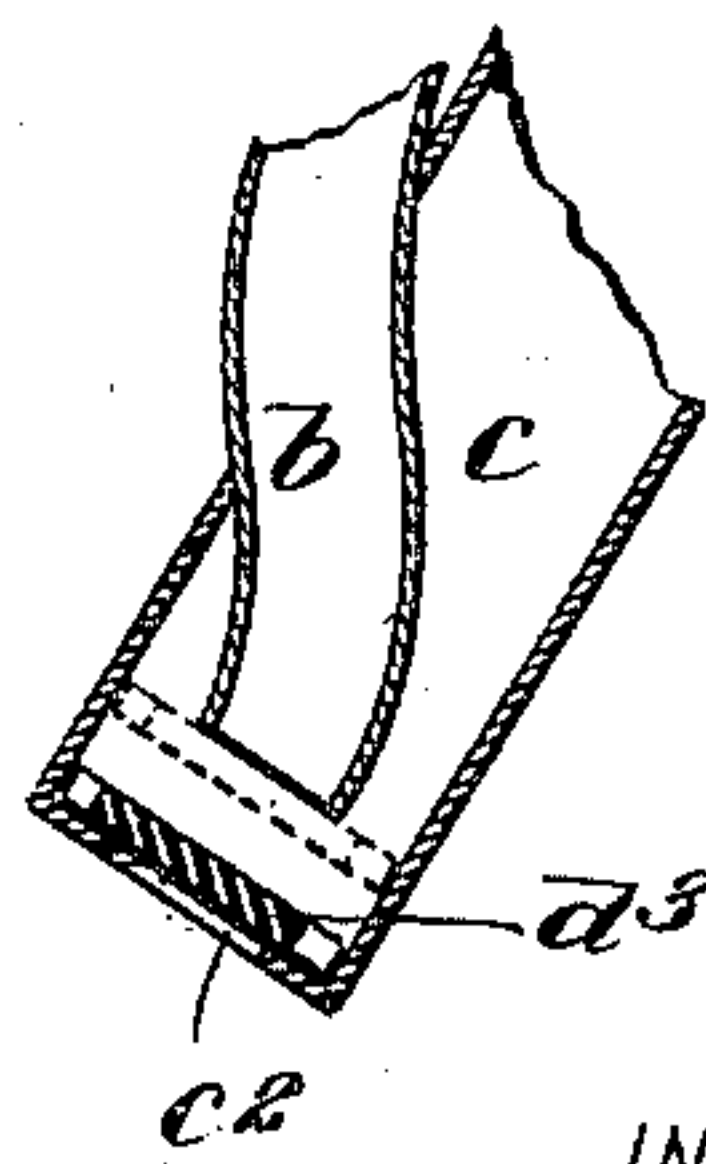


Fig. 4.



WITNESSES:

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WILLIAM L. HOWLAND, OF MONMOUTH, ILLINOIS.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 679,123, dated July 23, 1901.

Application filed April 5, 1901. Serial No. 54,452. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. HOWLAND, a citizen of the United States, and a resident of Monmouth, in the county of Warren and State of Illinois, have invented a new and Improved Oil-Can, of which the following is a full, clear, and exact description.

This invention relates to an oil-can having certain novel pump devices by which the oil may be forced from the can in a steady ample stream.

The invention comprises other features, all of which will be fully apparent from the following specification.

This specification is a specific description of several forms of the invention, while the claims are definitions of the actual scope thereof.

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

Figure 1 is a sectional side view of the invention, and Figs. 2, 3, and 4 are sections of various modified forms of the spout.

a indicates the oil-can, b the discharge-spout, and c the pump-cylinder. This cylinder is set in the can preferably diagonally, as shown, and has a screw-cap c' closing its upper end. The lower end of the spout b is run into the lower portion of the cylinder and opens downward toward the bottom end or head thereof. The lower end of the cylinder is formed with an inlet-orifice c^2 directly opposite the lower end of the spout or discharge-pipe b . This orifice c^2 , as shown in Fig. 1, is commanded by a valve d , which is guided by a pin d' , fastened to the cylinder and projected therein. The valve d is movable on this pin to seat against the lower end of the spout b and close the same or to seat over the orifice c^2 of the lower end of the pump-cylinder and close this orifice. The movements of the valve d are regulated by the fluid-pressure in the pump-cylinder. As the piston moves downward it causes the valve d to seat over the opening c^2 and close it. As the piston moves upward it draws the valve with it and causes the lower end of the spout b to be closed. The oil in the can flows freely into the cylinder and lies in the cylinder at the

same level that it lies in the can. As the pump-piston moves downward, therefore, it closes the opening c^2 and forces the oil from the cylinder into and through the spout. When the movement of the piston is reversed, the valve seats against the spout and an additional quantity of oil flows into the pump-cylinder upon the retraction of the piston.

e represents the pump-piston, which may be of any form desired. e' is the piston-rod, having a handpiece at its upper end.

f indicates a spring which is attached to the piston e and coiled around the piston-rod. The upper end of this spring is passed out of the cylinder c through the two openings c^3 in the upper part thereof and is thus engaged with the cylinder. This spring acts normally to raise the piston, and when the piston is forced downward against the spring upon the release of the piston the spring acts automatically to return it.

Now it will be observed that by removing the cap c' oil may be poured into the can through the upper end of the cylinder and that the oil in passing into the cylinder will flow out of the same through the openings c^3 , thus reaching the interior of the can. This enables me to fill the can without providing a special feed-orifice.

In Figs. 2, 3, and 4 various modifications of the valve d are shown. Fig. 2 shows a hinged or clack valve d^4 , working between the spout and pump-cylinder in essentially the manner before described. Fig. 3 shows a ball-valve d^3 , operating as before described, and Fig. 4 shows a plate-valve d^3 , which slides in the pump-cylinder to effect the necessary operations.

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

1. The combination of a pump-cylinder having an inlet-orifice in its lower end, a piston working in the cylinder, a discharge-tube passing through the lower side wall of the cylinder and projecting thereinto to a point opposite and adjacent to the inlet-orifice, and a single valve situated between the inlet-orifice and the discharge-tube and movable under the action of the piston to close either the cylinder-inlet or the discharge-pipe.

2. The combination of a pump-cylinder
having an inlet-orifice in its lower end, a pis-
ton working in the cylinder, a discharge-tube
passing through one side wall of the cylinder
5 and projected adjacent to the inlet-orifice, a
guide-pin held in the cylinder and projecting
from the inlet-orifice to the discharge-pipe,
and a valve mounted on and held by said
guide-pin, the valve being movable under the

action of the piston to close either the inlet- 10
orifice or the discharge-pipe.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

WILLIAM L. HOWLAND.

Witnesses:

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