

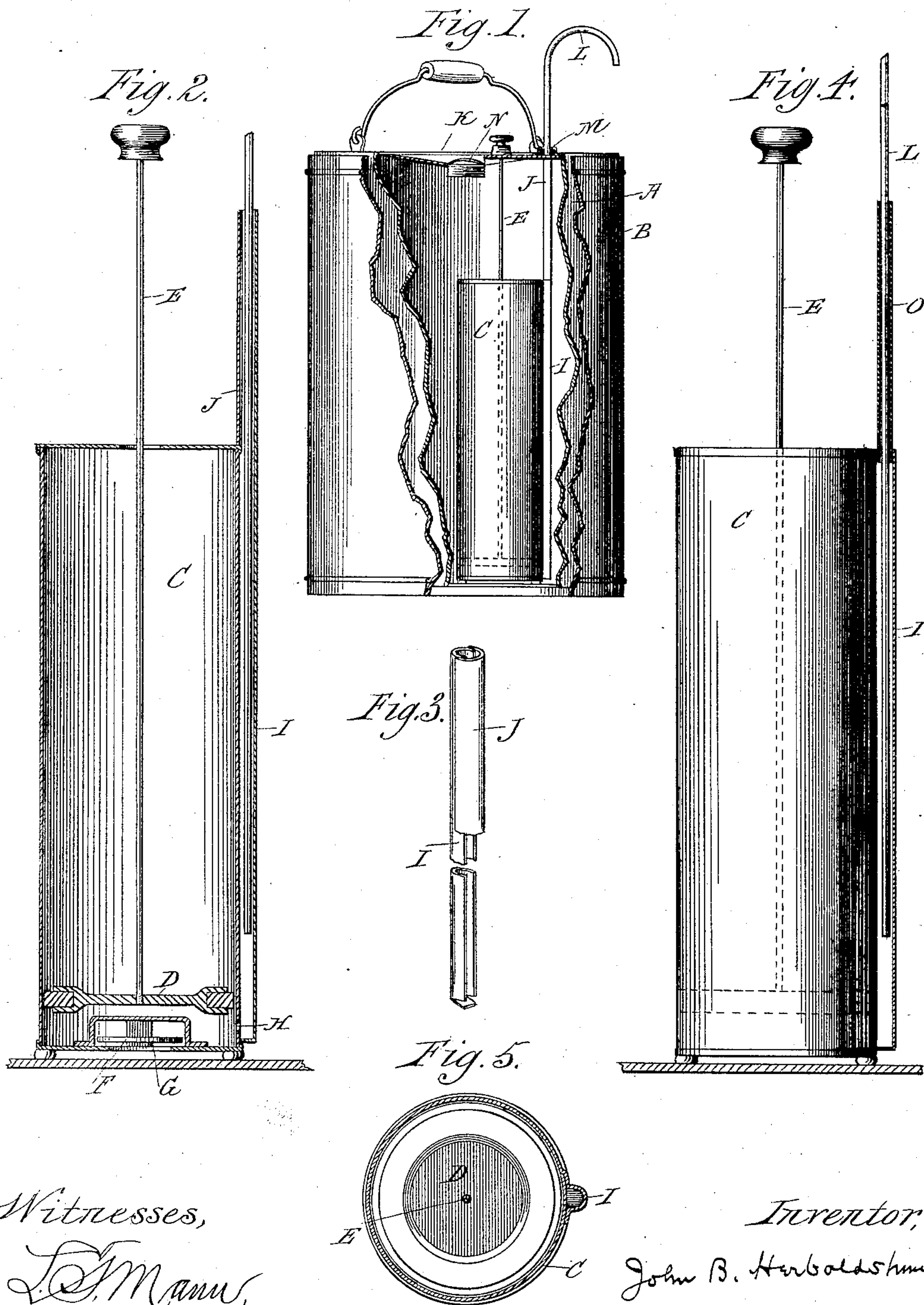
(No Model.)

J. B. HERBOLDSHIMER.

OIL CAN.

No. 353,417.

Patented Nov. 30, 1886.



Witnesses,
L. S. Mann,
Frederick Goodwin

Inventor,
John B. Herboldshimer
By, Offield Towle & Phelps
Attys.

UNITED STATES PATENT OFFICE.

JOHN B. HERBOLD SHIMER, OF CHICAGO, ASSIGNOR TO WILLIAM D. GIBSON
AND CHARLES P. PARRISH, BOTH OF COOK COUNTY, ILLINOIS.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 353,417, dated November 30, 1886.

Application filed July 24, 1886. Serial No. 208,978. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. HERBOLD SHIMER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Oil-Cans, (for which I desire to obtain Letters Patent of the United States,) of which the following is a specification.

My invention relates to that class of oil-cans designed for filling lamp-reservoirs in which the oil is forced out of the can, by means of a pump, through a discharge-tube passing up near the side of the pump-cylinder and provided with an adjustable nozzle; and it consists in several improvements, combining to make a cheaper and more convenient can than any heretofore placed upon the market. As heretofore constructed, wherever adjustable nozzles or slip-tubes have been used, it has been thought to be necessary to make the discharge-tube separate from the pump-cylinder, in order to give it a sufficiently regular form that there may be an accurate fitting between the slip-tube and the discharge-tube, whether the former is placed within or without the latter. This construction is expensive, for the reason that it requires a square joint at the bottom of the discharge-tube, where it communicates with the pump-cylinder, and also for the reason that to make a full tube of small size requires careful and skilled work. It is found in practice that a considerable percentage of the joints and tubes made for this purpose have to be discarded because of defects which cannot be avoided in rapid manufacture. It is obvious that if a discharge-tube could be placed along the side of the pump-cylinder and made either from a lap of the metal from which the pump-cylinder is formed or of similar sheet metal soldered in two places upon the side of the pump-cylinder, thus making use of the cylinder for one side of the discharge-tube, a much cheaper discharge-tube would be obtained than the one now in common use. It will be necessary, however, to provide for the close fit required between the slip-tube and the discharge-tube, and this would obviously be very difficult with a discharge-tube of the construction referred to. A washer at the top of the oil-can might be

used to keep the oil back, and I herein show such a construction; but this device, while to some extent answering the purpose, is less satisfactory in operation than a close fit between the slip-tube and the discharge-tube.

I propose to combine the advantages of a cheap discharge-tube lying along the side of a pump-cylinder with the close fit of independent discharge-tubes heretofore made by making the pump-cylinder of a less height than the height of the oil-can and continuing the discharge-tube from the top of the pump-cylinder to the top of the oil-can by means of a piece of round tubing soldered onto the discharge-tube at the top of the pump-cylinder, and also soldered into the top of the oil-can, the slip-tube being accurately fitted to this piece of tubing. This piece of tubing will be of such a length as to give a sufficient bearing-surface to keep the slip-tube in its vertical position and insure its satisfactory operation.

In the drawings annexed, forming a part of this specification, Figure 1 is a perspective view of an oil-can embodying my invention, a part of the side being broken away to show the interior construction. Fig. 2 is a vertical cross-section of the pump and discharge-tube. Fig. 3 is a detail view of the upper part of the discharge-tube, and Fig. 4 represents the improved form above referred to, in which the upper part of the discharge-tube is made to fit closely about the slip-tube; and Fig. 5 is a further modification.

The oil-can is of the usual construction, having the common double wall, a metal wall, A, being sheathed in a casing, B, of wood. The pump C is of usual construction, having piston-head D, piston-rod E, valve F, ingress-aperture G, and discharge-aperture H, connecting with discharge-tube I. This discharge-tube is made of sheet-tin or other suitable metal, bent into the form shown in Fig. 3, and applied to the side of the pump-cylinder. It projects above the cylinder to the top of the can, and the side closed by the cylinder at its upper end where it projects above the cylinder is closed by a second trough-shaped piece of metal, J, of a length equal to the distance between the top of the pump-cylinder and the top of the can, and of a size to fit closely upon the piece I when sprung over it, the two pieces

I and J being soldered together. The piece J is shown in Fig. 3 as sprung over the piece I, and should be pushed up until the upper ends of the two pieces are even before the two are soldered together. The upper end of the discharge-tube so constructed is soldered to the top K of the can. The slip-tube L passes through the top of the can into the discharge-tube, and is provided at this point with the usual washer, M. The top K has the usual dish shape to receive the lamp when being filled, with the opening N at its center, through which the can is filled.

In the modified and improved form shown in Fig. 4 the lower part of the discharge-tube, as far as the top of the pump-cylinder, is made precisely as heretofore described; but the upper part consists of a piece of small tubing, O, of brass or other appropriate material, soldered into the top of the tube I and made to fit closely about the slip-tube. Its upper end is soldered to the top of the can, and in this case the washer M may be dispensed with, the tube O fitting closely enough upon the slip-tube to prevent the escape of oil to any inconvenient extent.

In Fig. 5 I have shown a further modification, particularly applicable to the form last described, in which the tube I is made of one piece of metal with the side of the pump-cylinder, the latter being curved out at its joint to form the tube.

I claim—

1. The combination of an oil-can, a pump located within the same, and a discharge-tube, a part of said discharge-tube being made of a lap of the metal of the pump-cylinder, substantially as and for the purpose set forth.

2. The combination of an oil-can, a pump

placed within the same, the cylinder thereof being of less height than the height of the can, a discharge-tube formed along the side of the pump-cylinder, the side of the said cylinder forming a part of the discharge-tube, a piece of circular tubing soldered to said discharge-tube and extending from the top of the pump-cylinder to the top of the can, and a slip-tube nozzle accurately fitting said tubing and adjustable within the same, substantially as and for the purpose set forth.

3. In an oil-can, the combination of the pump-cylinder C, of a less height than the height of the can, the discharge-tube I, formed of thin sheet metal and lying along and in close contact with the side of the cylinder, the piece of circular tubing O, soldered to said discharge-tube at the top of the pump-cylinder and extending therefrom to the top of the can, and the slip-tube L, closely fitting into said tubing O, substantially as and for the purpose set forth.

4. The combination of an oil-can, a pump located within the same, the cylinder thereof being of a less height than the height of the can, a discharge-tube formed for the length of the pump-cylinder of a lap of the metal of the cylinder, and above the cylinder of a piece of round tubing soldered upon the end of that part of the discharge-tube lying along the side of the pump-cylinder, and extending thence to the top of the oil-can, and a slip-tube accurately fitting the upper portion of the discharge-tube, substantially as and for the purpose set forth.

JOHN B. HERBOLD SHIMER.

Witnesses:

FREDERICK C. GOODWIN,
E. L. HUBER.