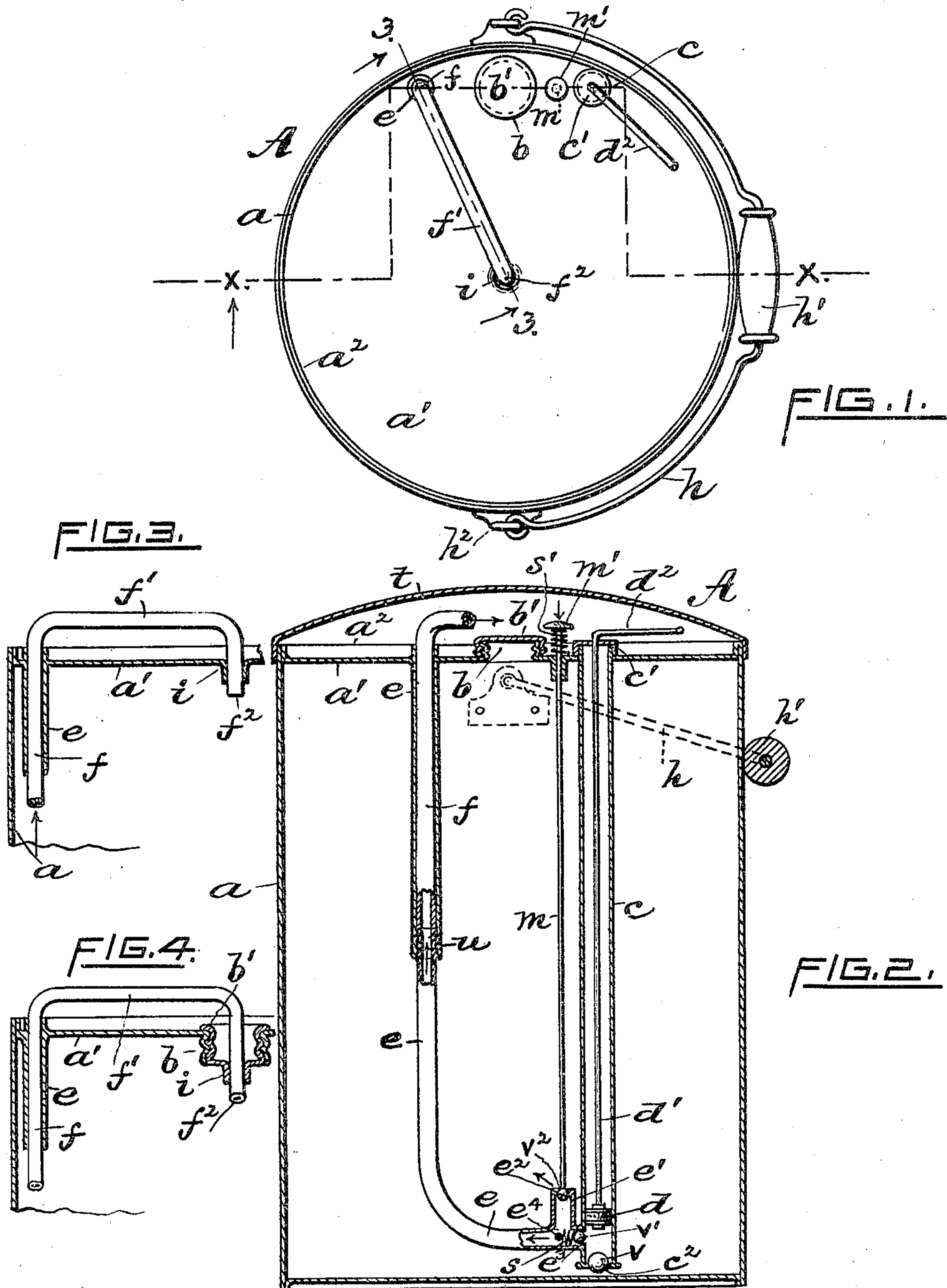


No. 822,622.

PATENTED JUNE 5, 1906.

R. F. MORSE.
DISPENSING CAN.

APPLICATION FILED OCT. 24, 1905.



WITNESSES.

C. J. Hannigan.
Calvin H. Brown

INVENTOR.

Rodolph F. Morse.
By Geo. H. Remington.
Atty.

UNITED STATES PATENT OFFICE.

RODOLPH F. MORSE, OF PROVIDENCE, RHODE ISLAND.

DISPENSING-CAN.

No. 822,622.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed October 24, 1905. Serial No. 284,148.

To all whom it may concern:

Be it known that I, RODOLPH F. MORSE, a citizen of the United States of America, and a resident of Providence, in the county of Providence, in the State of Rhode Island, have invented certain new and useful Improvements in Dispensing-Cans, of which the following is a specification.

My invention relates to "dispensing-cans," so called—that is, cans more especially constructed and adapted for pumping oil directly therefrom into the reservoirs or fonts of lamps, the can being also provided with means whereby oil may be readily drawn from the lamp itself back into the can when desired, all as more fully hereinafter set forth and claimed.

I am well aware that prior to my present improvements cans of the class above referred to have been adapted both for pumping the oil therefrom into the lamp, as well as for returning it from the latter into the can.

In the manufacture and production of my improved can the cost of the device or pumping apparatus is materially reduced. It is very simple, light, and easily manipulated and is not liable to get out of order. Dispensing-cans as usually constructed are necessarily air-tight in order to insure a proper action of the apparatus when it is used for returning oil from the lamp into the can. In my improved can, however, the oil may be readily and quickly returned therein even though the filling-nozzle itself be uncovered and open to the atmosphere.

In the accompanying sheet of drawings, Figure 1 is a top plan view of a dispensing-can embodying my improvements. Fig. 2 is a vertical sectional view of the same, taken on the irregular line xx of Fig. 1, the parts being represented in the normal or non-working position. Fig. 3 is a partial sectional view taken on line 3 3 of Fig. 1, and Fig. 4 is a similar view showing the filling-nozzle located at the center of the can.

In the drawings, A designates my improved dispensing-can complete ready for use. The body portion or reservoir proper a may have any suitable form and size and having a fixed disk-like cover or top a' . It is also provided with a filling-nozzle b and a removable screw-cap b' . The said top a' is upturned at its peripheral edge, as at a^2 , thereby forming a shallow basin adapted to prevent any surplus oil or drip from overflowing the sides of the can. The latter may be pro-

vided with ears h^2 and a bail h substantially as common.

At or near the edge of the can is mounted the vertically-extending plain pipe or pump-barrel c , the same being secured to and projecting a short distance above the top a' and having a removable cap c' , through which the pump-rod d' passes, the latter being bent to form an operating-handle d^2 . The other or lower end of the rod carries a suitably-packed piston d , slidably fitting the interior of the pipe c . The lower end of said pipe has a small inlet-opening c^2 , in which is seated a self-closing ball-valve v .

A branch or delivery pipe e leads horizontally from pipe c at a point just above the valve v . The intercommunicating outlet-passage or port e^3 has a ball-valve v' seated therein, a pin or stop e^4 and light spring s bearing against said pin and valve v' , keeping the latter normally closed. The pipe e is bent and continued upwardly through the top a' , substantially as stated with respect to pipe c . At a point beyond the valve v' the pipe e is provided with a short upright nozzle e' , having an outlet e^2 in its top end, in which is seated a relief or siphon valve v^2 , the latter being secured to the lower end of a light vertical rod m , its upper portion passing through the top a' and being capped with a button or head m' . A spring s' is interposed between said top and head for maintaining the valve in the normally closed position, all as clearly shown in Fig. 2.

I prefer to make the discharge or lamp filling tube telescopic. To that end I employ a vertical pipe f , snugly yet slidably fitting the interior of the said stationary pipe e , its upper or exposed portion being bent horizontally at f' and terminating in the downwardly-bent end portion f^2 , the latter when not in use fitting and closing the said central or drainage opening i , as represented in Fig. 3. (See also Fig. 4.) The can may have an auxiliary or protective cover t , removably secured thereto, as shown in Fig. 2.

The manner of operation of my improved oil-containing dispensing-can A may be described as follows: The false cover t is first removed, followed by elevating the movable portion f of the discharge-pipe to the desired height and swinging it around axially, so that its end f^2 registers with the filling-nozzle of the lamp, or, if more convenient, the lamp may be placed upon the center of the can's top. Now upon seizing and lifting the

handle d^2 of the pump-rod a partial vacuum is formed in the lower portion of the pump, the oil meanwhile flowing into it via passage e^2 and lifting-valve v , the other valves v' and v^2 then being normally seated or closed. Upon the downward stroke of the piston the valve v is seated and the trapped oil forced from the pump-chamber, via opening e^3 , past the yielding-mounted valve v' and into the discharge-pipe $e f$, the oil overflowing from the end f^2 into the lamp-font, the operation being continued until the lamp is filled to the desired height or level, thus practically completing the operation. If, however, the operator wishes to return any of the fluid contents from the lamp back into the can, it may be quickly and readily effected by simply inserting the said end portion f^2 of the discharge-pipe into the fluid, at the same time opening the relief or siphoning valve v^2 by pressing downwardly upon the button m' , thereby uncovering the lower end of the static column (see arrow at e^2 , Fig. 2) and establishing a siphon action, the same being uninterruptedly continued as long as the valve is open and the shorter leg of the siphon remains sealed in the fluid or oil. Upon releasing the pressure from the button m' the spring s' automatically and instantly closes the relief-valve.

In lieu of making the stationary discharge-pipe e of two sections having different diameters, the upper section being the larger and having the adjacent ends of the sections secured together, as indicated at u , Fig. 2, it is obvious that the pipe may consist of a single length having its diameter throughout equal to that of the said upper section.

The can may have its filling-nozzle located at the center of the top a' , as represented in Fig. 4. In this case the screw-threaded nozzle b extends downwardly from the under side of the top and is provided with a removable screw-cap b' , having said drainage-opening i therein, adapted to receive the free or delivery end f^2 of the movable pipe-section f . As thus constructed, the nozzle is placed centrally of the can instead of being located

near its edge, the screw-cap at the same time being adapted to receive the outer end portion of pipe f , substantially as before stated.

It may be added that minor changes may be made in my improved dispensing-can A without departing from the invention as claimed. Owing to the extreme simplicity of the apparatus, the liability of its becoming accidentally inoperative is reduced to a minimum.

I claim as my improvement and desire to secure by United States Letters Patent—

1. In a dispensing-can, the combination with the body a and a top secured thereto, of a pump-barrel secured to said top, a ball-valve normally closing the lower or inlet passage to the pump, a manually-actuated piston mounted in the pump-barrel, a discharge-pipe communicating with the pump above said valve and extending therefrom through the top of the can, a ball-valve normally closing the outlet-passage between the pump and discharge-pipe, a branch pipe or nozzle in continuous open communication with the said discharge-pipe and having an opening into the can-chamber, and a manually-controlled valve for automatically and normally closing the said opening when the downward pressure upon the valve is removed, substantially as hereinbefore described.

2. In a can of the character described, the combination of a single-acting pump, self-closing inlet and discharge valves communicating with the pump-barrel, an upwardly-extending discharge-pipe secured to the lower portion of the pump-barrel having said discharge-valve movably mounted therein, and a manually-controlled self-closing siphon-valve mounted in and normally closing an opening formed in said discharge-pipe, substantially as set forth.

Signed at Providence, Rhode Island, this 21st day of October, 1905.

RODOLPH F. MORSE.

Witnesses:

GEO. H. REMINGTON,
CALVIN H. BROWN.