

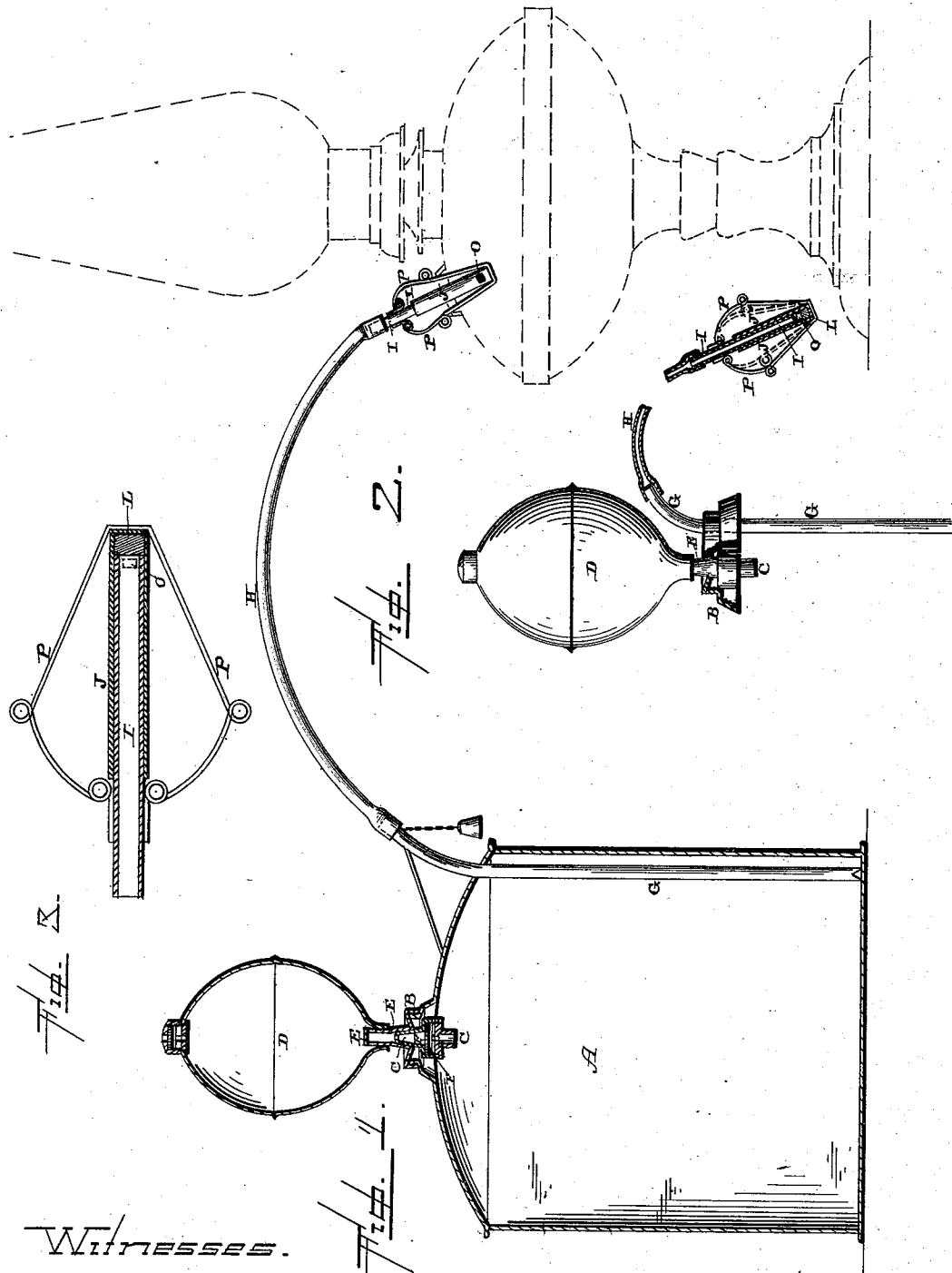
(Model.)

W. W. HUTCHINS.

GASOLINE CAN.

No. 377,520.

Patented Feb. 7, 1888.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

WILBUR W. HUTCHINS, OF NEWPORT, VERMONT.

## GASOLINE-CAN.

SPECIFICATION forming part of Letters Patent No. 377,520, dated February 7, 1888.

Application filed November 21, 1887. Serial No. 255,804. (Model.)

### *To all whom it may concern:*

Be it known that I, WILBUR W. HUTCHINS, a citizen of the United States, residing at Newport, in the county of Orleans and State of Vermont, have invented certain new and useful Improvements in Gasoline-Cans, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in lamp-fillers; and it consists in a cap for the oil-can having a short pipe through it to which the bulb is applied, and in which is placed a valve to retain all of the surplus air and gas in the can, and a flexible tube connected to the outlet of the can and provided with a valve which is operated by springs, as will be more fully described hereinafter.

The objects of my invention are to pass a pipe through the air-tight-fitting cap of the can, to which the bulb or other air-compressing device is applied, and in which is placed an automatically-closing valve which will prevent the escape of the compressed air or gas from the can when the bulb is removed, and to attach to the outlet-pipe a spring-actuated tightly-closing valve, which is operated by being forced into the opening in the lamp, and which, when withdrawn, is instantly closed, so as to stop the flow of oil, gasoline, or other fluid from the can.

Figure 1 represents a side elevation of a lamp-filler embodying my invention, partly in section. Fig. 2 is a detached view of the cap, showing the outlet-pipe connected thereto. Fig. 3 is an enlarged detail view of the metallic pipes I J and their attachments.

A represents an ordinary oil-can, which is provided with a tightly-fitting screw-cap, B, in the usual manner. Passing through this cap B is a tube, C, which has its upper end to extend a suitable distance above the cap, so as to allow the bulb D to be applied directly thereto. For the sake of convenience, a short metallic tube, E, is connected to the bulb, and the lower end of this tube forms a tight joint with the upper projecting end of the tube C, as shown. The lower end of the tube C projects below the top of the cap sufficiently far, and in it is placed an automatically-closing valve, F. When the bulb is compressed, air is forced into the can upon the top of the fluid until a sufficient atmospheric pressure has been

obtained, and then the valve in the tube C instantly closes upward, so as to prevent the escape of any of the air, gas, or vapor in the can, whether the bulb is removed or not. If all of the air in the can is not used in filling the lamps at any time, it can be retained in the can by the valve, and thus be held ready for use at another time. This valve also serves to prevent the escape of any of the gas or vapor from the can and to keep any of the fluid in the can from splashing out during transportation.

In lamp-fillers heretofore used, when the bulb is removed from the can, all of the surplus air in the can escapes at the same time, and hence the air must be compressed in the can each time it is desired to fill the lamps if the bulb has not been left in position. By the construction here shown it is immaterial whether the bulb is removed or not from the cap of the can, for the valve in the tube C retains the air until the cap itself is removed or all of the fluid in the can has been forced therefrom through the outlet-pipe G in the usual manner.

The inner end of the outlet-pipe extends to or near the bottom of the can, and to the outer end of the pipe G is attached the flexible tube H, of any desired length, and to the outer end of this tube is connected the metallic pipe I. Placed over the outer end of the metallic pipe I is the tube or pipe J, which has an endwise movement upon the one, I, and which has its outer end closed by means of a cork or plug, L, of any kind, and is provided with the openings O in its sides. Rigidly fastened to the outer end of this pipe J and to the metallic pipe I are the two springs P, which may either be shaped as here shown or in any other manner that may be preferred. When these springs are compressed, either by being forced into an opening in the lamp-bowl or by the pressure from the hands of the operator, the pipe J is forced outwardly upon the pipe I, so as to move the plug L from against the end of the pipe I, and thus allow the oil to flow from the pipe I through the openings in the pipe J into the lamp-bowl. These springs exert their tension in pressing the plug L in the pipe J tightly against the end of the pipe I, and thus prevent the escape of any fluid to the pipe at any time. When the springs are compressed, the tube J is removed outward upon the pipe

I, so that the pressure of air within the can can freely force the oil outward for the purpose of filling the lamp.

The operator has but to work the bulb until a suitable amount of air is compressed in the can, and then insert the ends of the tubes I J into the opening in the lamp sufficiently far to have the springs come in contact with opposite sides of the opening, and thus force the tube J outward, so as to withdraw the end of the pipe I from against the plug L, when the oil will flow into the lamp until filled. In withdrawing the device from the lamp the springs instantly close the discharge. As above stated, after the air has once been compressed in the can it is held there by the valve in the tube C, and then the bulb may be removed, so as to be out of the way in carrying the can around. The can is set upon the table near the lamp, and when the tubes are forced into the opening in the lamp the oil is forced out by the air. This flow will continue as long as there is pressure enough in the can to cause the flow, or until the supply of oil in the can has been exhausted.

As shown in Fig. 2, the outlet-pipe may be connected directly to the cap, so that the whole attachment can be removed at will from one can and applied to another whenever so desired. In this case, if the can has an outlet-pipe, like the usual oil-cans, the mouth of the pipe must be closed, so as to prevent the escape of air through it.

Having thus described my invention, I claim—

1. The combination of the can, the tightly-fitting cap, the tube extending through the

cap and provided with a valve, and adapted at its outer end to receive the bulb, the valve being adapted to close from the pressure of air within the can, and thus retain the air whether the bulb is removed or not, substantially as shown.

2. The combination of the can provided with an outlet-pipe, G, the flexible tube, the pipes I J, and the springs connected to the pipes, one of the pipes being provided with a plug to close the end of the other pipe and with openings through which the oil escapes, substantially as described.

3. The combination of the oil-can provided with an outlet-pipe, G, the flexible tube connected to the outer end of the pipe G, the metallic pipe I, the pipe J, which fits over the outer end of the pipe I and provided with escape-openings, the plug L, placed in the outer end of the pipe J, and the springs, which are secured to the two pipes, and which are adapted to be compressed by being forced into the opening in the lamp, substantially as set forth.

4. A lamp-filling attachment for oil-cans, consisting of the combination of the cap, a valved air-pipe extending through it, an air-compressor which can be attached to the pipe, an outlet-pipe for the oil secured to the cap, a flexible tube, the metallic pipes I J, and the springs connected to the pipes, substantially as specified.

In testimony whereof I do affix my signature in presence of two witnesses.

WILBUR W. HUTCHINS.

Witnesses:

HARMON S. GRAVES,  
CHARLES E. ALLEN.