

No. 756,373.

PATENTED APR. 5, 1904.

W. JOYCE.
VENT APPARATUS FOR OIL OR OTHER CANS.

APPLICATION FILED MAY 13, 1903.

NO MODEL.

Fig. 1.

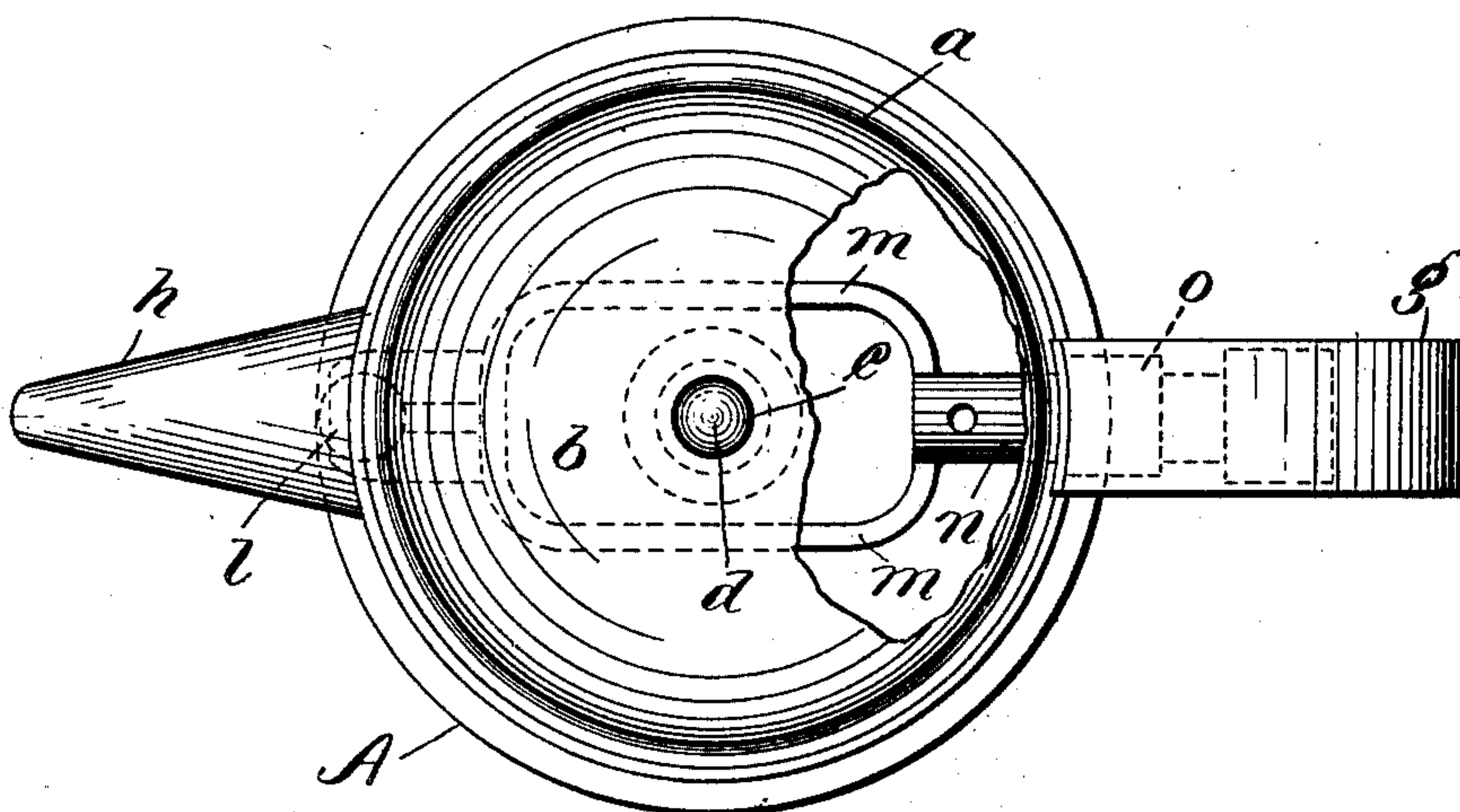
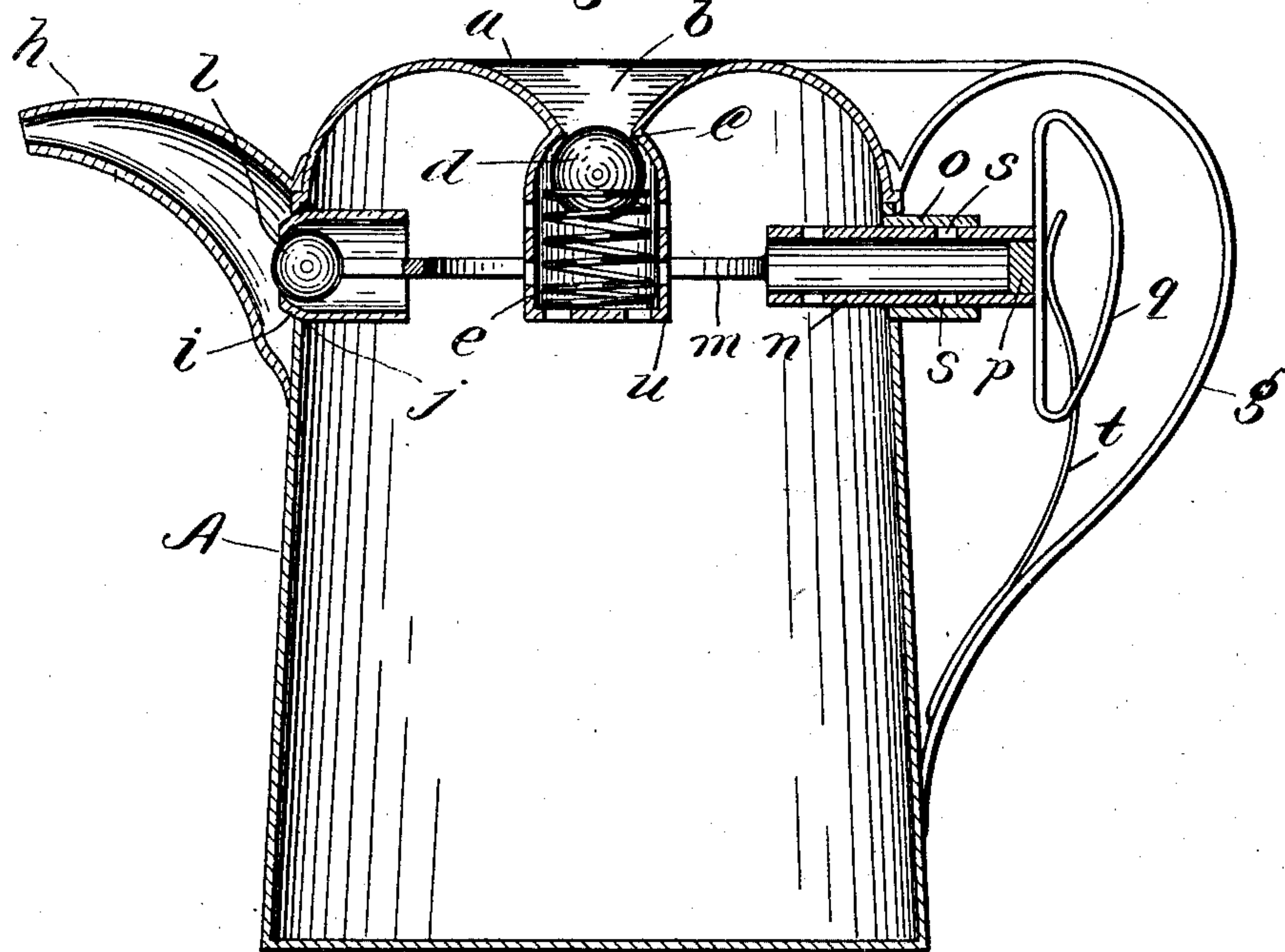


Fig. 2.



Witnesses
Ernst Lundgren
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By his Attorney A. O. Thayer

UNITED STATES PATENT OFFICE.

WILLIAM JOYCE, OF NEW YORK, N. Y.

VENT APPARATUS FOR OIL OR OTHER CANS.

SPECIFICATION forming part of Letters Patent No. 756,373, dated April 5, 1904.

Original application filed February 9, 1903, Serial No. 142,619. Divided and this application filed May 13, 1903. Serial No. 156,908. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOYCE, a citizen of the United States of America, and a resident of the borough of Manhattan, New York city, and State of New York, have invented certain new and useful Improvements in Vent Apparatus for Oil or other Cans, of which the following is a specification.

My invention relates more particularly to cans to be used for volatile and dangerous fluids—such as gasoline, naphtha, and the like—but may be employed with cans for any fluid to prevent accidental waste through the spout or nozzle; and it consists of the improved automatically opening and closing apparatus hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 is a top view of a can provided with my improved vent apparatus with part of the cover broken out. Fig. 2 is a vertical section.

The top *a* of the can-body *A* has a central depression *b*, forming a catch-basin for any laterally-deflected liquid issuing from the nozzle of the faucet of the cask or other vessel from which the can is to be filled. In a central perforation *c* of this basin a ball-valve *d* or other suitable valve is fitted to close from the under side, with a suitably-caged spring *e* for closing and adapted to yield and allow the valve to open when the can is presented under and the valve is pressed against the nozzle or spout from which the can is to be replenished or when the spout or nozzle of a replenishing-can held in the hand is pressed against the valve, the can *A* being at rest.

The valve-opening will preferably be of suitable size for the nozzle of the replenishing-faucet to enter far enough to deliver the liquid without spilling; but in case of spilling or overfilling the can the catch-basin receives the overflow and delivers it through the valve-opening when the supply is shut off and before the valve is permitted to close. The can is provided with the usual handle *g* on one side and the spout *h* on the opposite side.

For hermetically closing the nozzle or spout *h* of the can for protection against escape of volatile and dangerous liquids or vapors and

for readily venting the can when it is desired to pour out the contents or any part thereof I have provided in the vertical plane of the handle *g* and spout *h* a tubular valve case or seat *i*, extending through the can-body at *j* from the inside and communicating with the nozzle and being open to the interior of the case to form the outlet from the can to the spout, and I have provided therewith a valve *l*, the stem of which, *m*, is connected with a tubular plunger *n* working in a tubular slide-way *o*, attached to the can-body directly opposite to the valve *l* and extending through it and the can-body, which is perforated coincidentally with said slideway for allowing said plunger to reciprocate.

The outer extremity of the plunger *n* is plugged at *p* to prevent inlet of air, and a suitable handle *q* is attached to said end for opening the valve, said handle being, through the arrangement of the valve and its stem in the vertical plane of the spout *h* and can-handle *g*, located within the field inscribed by the can-handle *g*, so that both handles are included in the grasp of the hand when taking up the can for use, and the valve is thereby automatically opened for use by the act of lifting the can, and the vent device is also automatically opened at the same time. This device consists of one or more vent-openings *s* in the tubular plunger *n*, which open to the air at the end of slideway *o* when the valve *l* is opened.

A spring *t* is applied to the handle *g* and against the outer end of the valve-stem plunger for automatically closing the valve when the user releases the valve-handle *q*, said spring being a suitable bow-shaped wire or plate adapted to be applied within the inscribed field of the can-handle, with one end soldered or riveted to the inside of the handle in the angle between the lower end of the handle and the side of the can, with its free end bearing against the projecting end of the plunger *p*, where it is easy of access for adjustment and repair, and to said end the handle *q* is attached, so that the fingers of the hand grasping the can-handle will at the same time grasp the valve-handle on opposite sides of the valve-rod and open said valve.

In a can having the filler device and vent apparatus herein shown it is important to have such drop of the filler valve-cage and such elevation of the vent-valve for the best arrangements of them, that they interfere with the use of a valve-stem extending directly across from one side of the can to the other, wherefore I have made said stem in a yoke of two members, between which there is space permitting the drop of the cage below the level of the stem.

The special features of the filler apparatus are not claimed herein, said apparatus being the subject of my pending application, Serial No. 142,619, filed February 9, 1903, of which this is a divisional application.

What I claim as my invention is—

The combination with the can having the spout and the handle on opposite sides in the same vertical plane, and valve controlling the

escape-passage through the spout, of the tubular slideway in the wall of the can opposite the spout, plugged tubular stem of the valve, and the vents in said tubular stem, said stem extending through the slideway-handle on said stem adapted to be grasped both sides of the stem together with the can-handle to open the valve and also open the vent by the pull of the hand gripping the handle and the bow-spring attached at one end to the handle in the angle between said handle and the side of the can and bearing at the other end against the valve-stem.

Signed at New York this 2d day of May, 1903.

WILLIAM JOYCE.

Witnesses:

C. SEDGWICK,
A. P. THAYER.