

No. 855,525.

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W. H. McNUTT.
SAFETY CAN NOZZLE.
APPLICATION FILED MAR. 6, 1907.

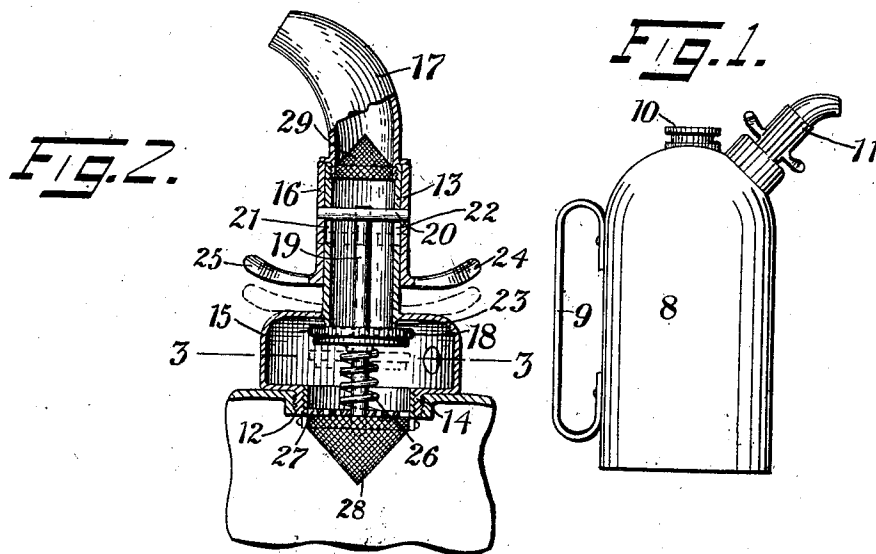


FIG. 5.

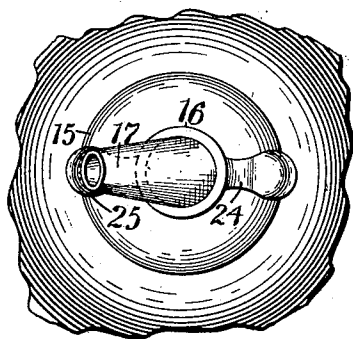


FIG. 3.

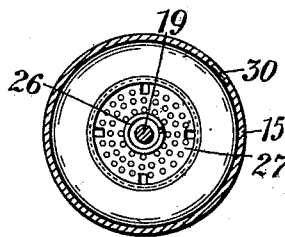
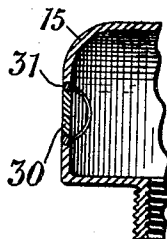


FIG. 4.



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UNITED STATES PATENT OFFICE.

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SAFETY CAN-NOZZLE.

No. 855,525.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed March 6, 1907. Serial No. 360,941.

To all whom it may concern:

Be it known that I, WILLIAM H. McNUTT, a citizen of the United States, residing in New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Safety Can-Nozzles, of which the following is a specification.

This invention has reference to valved spouts for various kinds of cans or receptacles, and especially relates to what are sometimes termed squirt-cans or oil-cans, although it is especially designed to be used for volatile and explosive fluids like gasoline or naphtha; that are used by printers for cleaning type and various other things; and also used by tailors and others where such fluids are employed for cleaning clothing and fabrics.

It is an object of the invention to provide a spout member for a can containing a valve that is normally retained tightly closed and will remain open only while pressure is exerted thereon by the user, the valve closing immediately upon the pressure being removed.

A further object of the invention is to provide a form of valved spout in which when the valve is closed after use, such gasoline that does not run out of the spout will pass back into the can, and not remain in the spout member. And in conjunction therewith safety members in the nature of perforated plates or wire gauze are provided on both sides of the valve in the spout member.

In the accompanying drawings representing one embodiment of the present invention, Figure 1 illustrates a filler can in side elevation. Fig. 2 is a fragmentary view enlarged showing in section the valve spout. Fig. 3 is a section on the line 3—3 of Fig. 2. Fig. 4 is an enlarged detail view of a portion of the spout member, and Fig. 5 is a fragmentary plan view of the parts shown in Fig. 2.

The invention is shown in Fig. 1 as applied to a can 8 having a handle 9 and a filling cap 10 at the top. The spout member denoted generally by 11 is shown secured to the can top adjacent the cap 10.

The spout member comprises essentially two telescoping tubes, one of which carries the valve seat, while the other is secured to the valve whereby the sliding movement will open and close the valve on its seat. Means such as a coil spring are provided to normally retain the valve closed on its seat.

When the members are shifted against the force of the spring, the valve is opened and the gasoline can be poured out upon inverting the can but immediately upon release of the telescoping tube member, the spring will close the valve and no more gasoline can flow out, and its vapors are prevented from escaping, as well as flame is prevented from access to the vapor in the can.

In the construction herein illustrated, the top of the can has a threaded opening 12, in which screws a tube member having an enlarged chamber at its intermediate portion. The tube comprises a neck portion 13 at one end connected with a threaded neck portion 14 at the other end, by an enlarged portion 15 constituting a valve chamber. The neck 14 is threaded to screw into the threaded opening 12 in the can, that may be elongated to provide a sufficient threading portion. The neck is screwed into the can until the bottom of the chamber 15 rests on top of the can. A tube 16 telescopes on the neck portion 13 and may be provided with a pouring extension 17 that is shown curved and somewhat funnel shaped or reduced. A valve in the form of a disk 18 operates in the chamber 15 by being secured to a stem 19, connected at the top by a cross bar 20 with the outer telescoping tube 16; the bar 20 passing through slots 21 and 22 in the neck tube 13, permitting the outer tube to slide to move the valve to and from its seat. A rim 23 is preferably provided at the top of the chamber 15, being practically an extension into the chamber of the neck 13, which forms the seat for the valve 18; the valve being preferably provided with leather or other suitable washer for tightly closing the opening. The sliding tube 16 may be provided with wings 24 and 25 for engagement by the fingers of the operator to move the valve to open position; its movement being limited by the engagement of these wings with the top of the chambered member 15 as indicated in broken lines in Fig. 2. The valve is normally retained closed by a spring. In the construction illustrated a coil spring 26 surrounding the valve stem 19 below the valve, engages an apertured plate 27 screwed into the lower neck 14, the plate having a central bore through which the valve rod slides. The minute openings in this plate form a safety device preventing flame or heat from igniting vapor in the vessel. If desired a gauze cone 28 may be provided on the lower side of the

plate 27 for a similar purpose. A similar safety member 29 is also placed in the outlet member 16, that may be either perforated metal or wire gauze, preferably both.

- 5 From this construction it will be seen that when it is desired to pour from the can, it is inverted and the valve opened by pressing on the wings on the sliding member, which will push the valve inward from its seat, permit-
 10 ting the gasoline to flow from the chamber through the spout tube. Back-draft is effectually prevented by the two safety members provided in the pouring device. The valve being released, will at once seat
 15 itself, the remaining gasoline will flow out of the telescoping tube members. Upon righting the can, the gasoline remaining in the chamber portion 15 will flow down into the can through the perforated plate 27 and gauze 28.
 20 Should a fire or intense heat occur near the can, the vapors formed are permitted to escape by means of a fusible member provided below the valve, preferably in the chamber 15. As shown in Fig. 4, a disk 30 is secured
 25 in an opening in the side of the chamber by a fusible ring 31, preferably of solder. The heat will melt this ring and the disk will blow out, permitting escape of the vapors gener-
 30 ated. Yet should these vapors ignite they cannot back-fire into the can by reason of the aperture members 27 and 28.

Having thus described my invention, I claim:

1. The combination with a can, of an outlet
 35 member secured at an opening in the can and having an intermediate chambered part, the outlet member having a valve closing its ad-
 mission to the outlet of the chamber, the outlet member having a telescoping portion
 40 connecting with said valve, a spring arranged to press the valve against said open-
 ing, and apertured diaphragms in the outlet

member, one on each side of the chambered part.

2. The combination with a can having an
 45 opening therein, of an outlet member comprising a tubular portion having an enlarged chamber at an intermediate part, a valve
 closing the opening from the chamber into the outlet portion of the member, a spring
 50 normally retaining the valve seated, a spout member sliding on the outer end portion of the outlet member and rigidly connected
 with said valve whereby the valve can be opened, a member with minute openings ar-
 55 ranged in the outer portion of the outlet member, and a member with minute openings in the outlet from the opening in the can
 into the outlet member.

3. The combination with a can having an
 60 opening therein, of a tubular member having a chamber at an intermediate portion and fitted into said opening, a valve arranged to
 close the opening from the chamber into the outlet portion of the tube, a plate with mi-
 65 nute openings extending across the opposite portion of the tube, a stem for said valve sliding in a bore in the latter plate, a spout tube
 sliding on the outlet portion of said tube, a cross bar connecting the spout member with
 70 the valve stem, the inner telescoping member having slots through which the cross bar is slidable to permit movement of the telescop-
 ing member to open and close the valve, and a
 75 coil spring on the valve stem between the apertured plate and the valve to press the valve against its seat.

Signed at Nos. 9-15 Murray st., New York, N. Y., on this 5th day of March, 1907.

WILLIAM H. McNUTT.

Witnesses:

WILLIAM H. REID,
 FRED. J. DOLE.