A. K. SWEEN.

DISPENSING CAN OR VESSEL.

APPLICATION FILED JULY 22, 1907.

955,013. Patented Apr. 12, 1910.

Fig. 1.

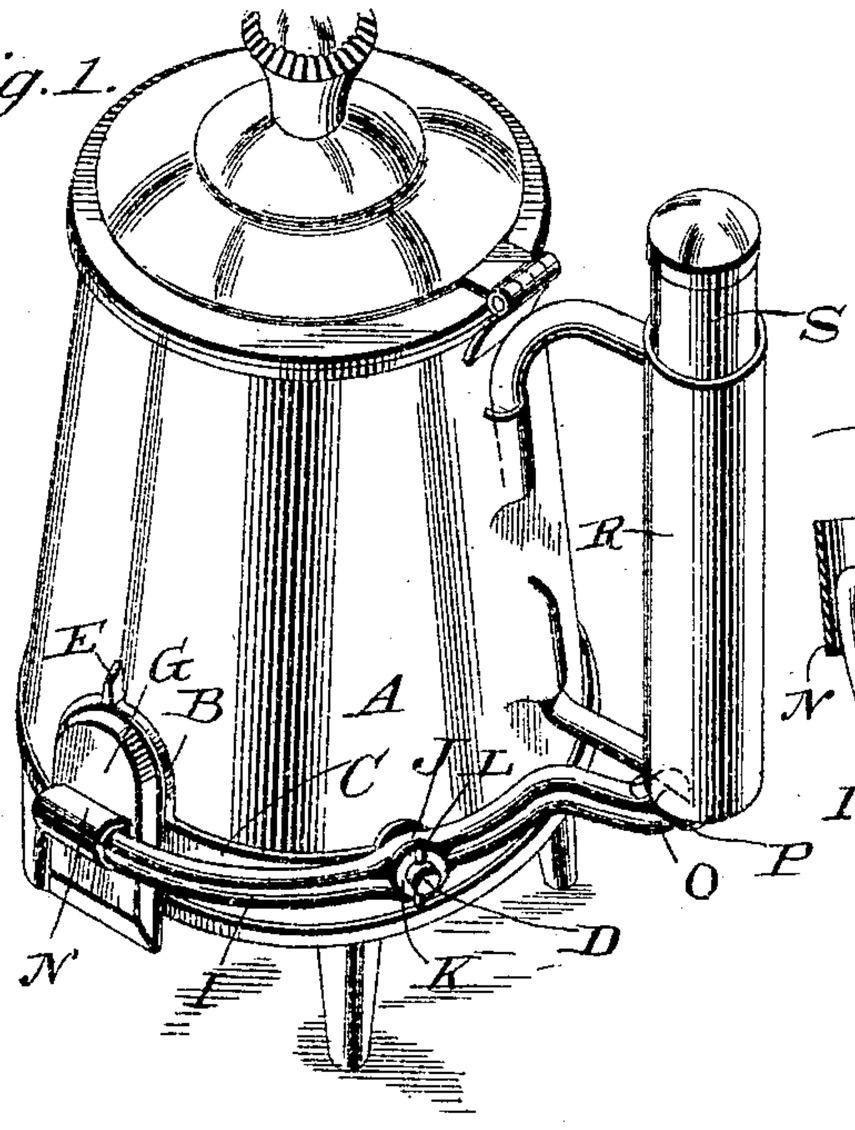


Fig. 2.

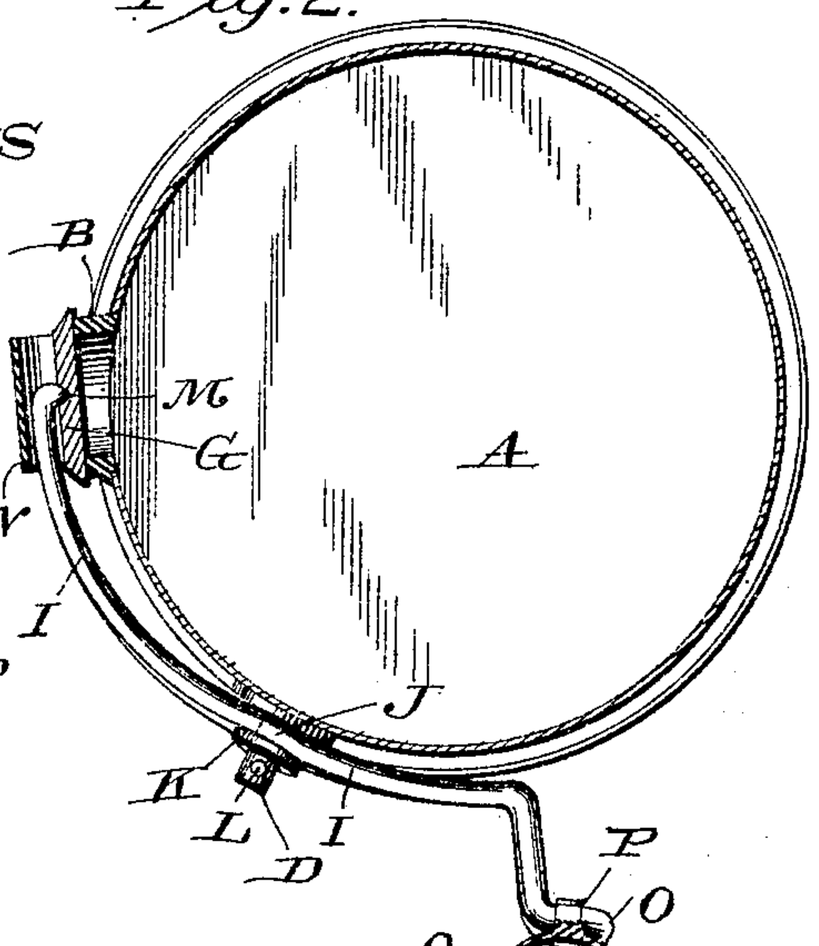


Fig. 3.

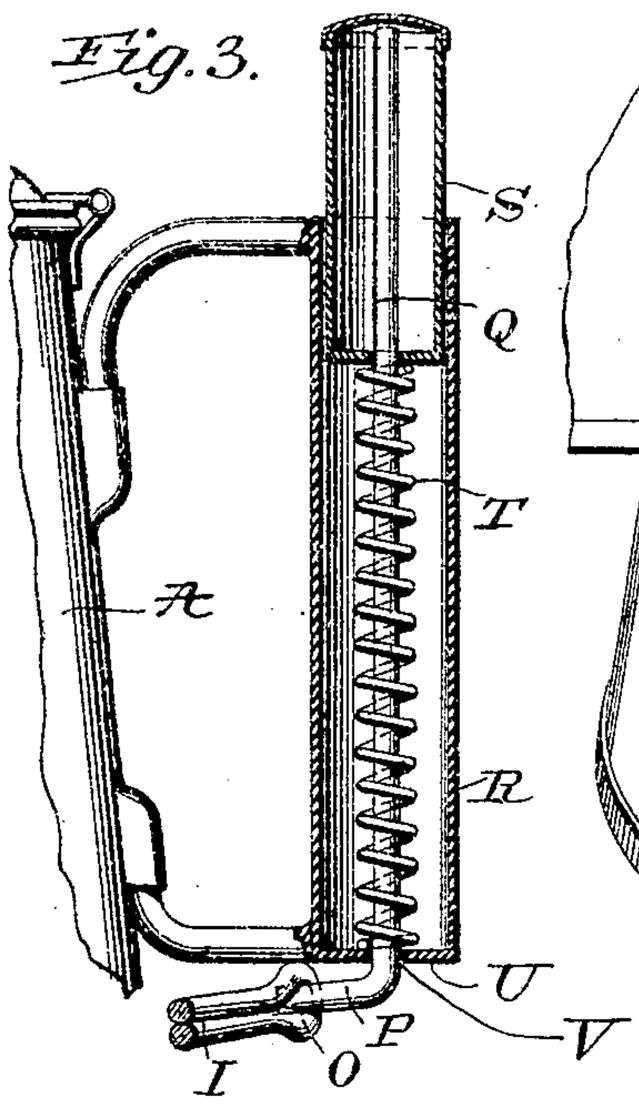


Fig. 4.

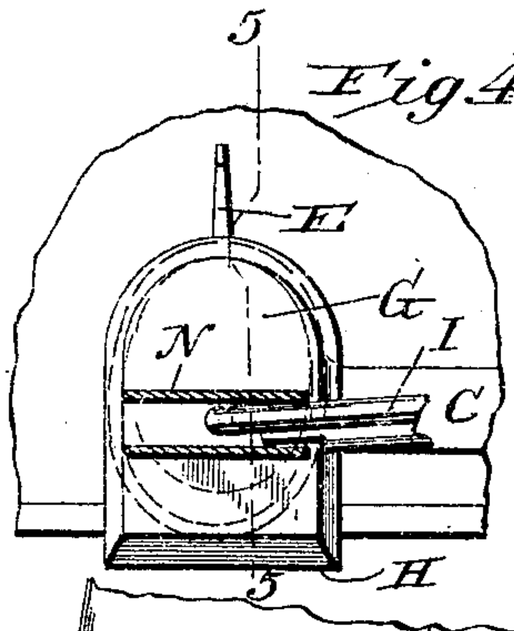


Fig. 5.

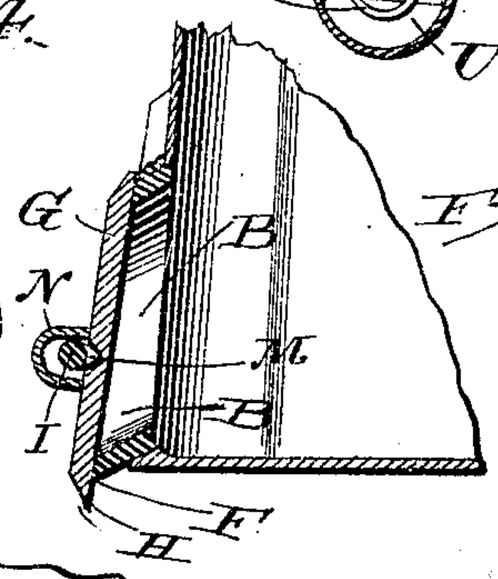
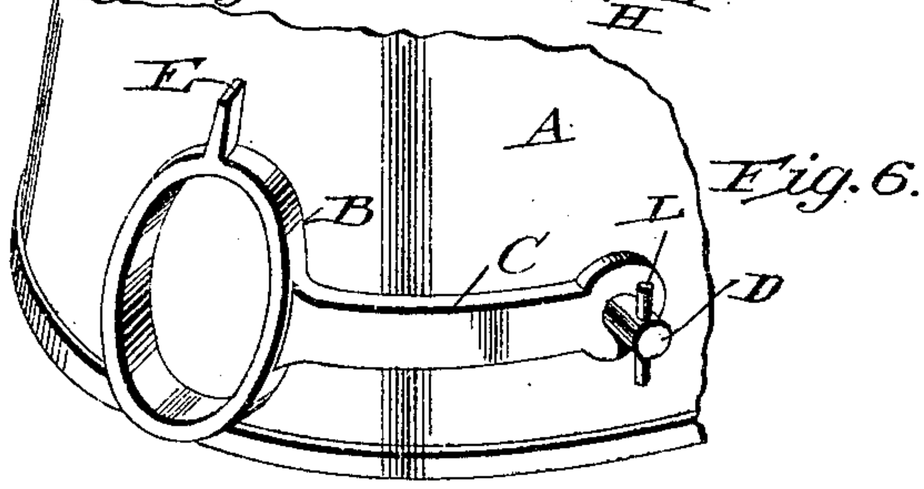


Fig. 6.



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UNITED STATES PATENT OFFICE.

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DISPENSING CAN OR VESSEL.

955,013. Specification of Letters Patent. Patented Apr. 12, 1910.

Application filed July 22, 1907. Serial No. 384,953.

To all whom it may concern:

Be it known that I, ANTON K. SWEEN, a citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Dispensing Cans or Vessels, of which the following is a specification.

My present invention pertains to improvements in dispensing cans or vessels, the construction and advantages of which will be hereinafter set forth, reference being had to the annexed drawings, wherein:

Figure 1 is a perspective view of the preferred form of can; Fig. 2 a horizontal sectional view taken through the valve; Fig. 3 a vertical sectional view of the spring-pressed operating plunger; Fig. 4 an enlarged detail view of the valve and a portion of the operating lever or arm; Fig. 5 a sectional view taken on the line 5—5 of Fig. 4; and Fig. 6 a perspective view on an enlarged scale showing the valve-seat with the supporting arm for the fulcrum or axle of the operating lever.

The main object of the invention is to provide the can or receptacle with a valve which will completely cut off the flow of liquid therefrom, and prevent all dripping.

A further object of the invention is to provide special means for mounting the slide valve.

Another object of the invention is to provide a simple and efficient operating device for the valve.

Referring to the drawings, A designates the can or receptacle, provided with an opening adjacent to its lower portion through which the liquid passes. A member B, see Fig. 6, is secured to the can in line with the opening, said member being provided with an outwardly-extending arm C, which at its opposite end carries a pin or axle D, forming the fulcrum or support for the operating lever for the valve, hereinafter referred to. A wing E extends upwardly from the elliptical member B, the forward or outer face of said wing standing in alinement with the valve-seat, or outer face of the member B. As will be noted upon reference to Fig. 5, the lower forward edge of the member B is brought to a sharp angle, as indicated at F, and the valve G which works upon the valve-seat is provided with a sharp or knife edge H at its lower end. By thus constructing the parts, any dripping of the material as the valve is closed is prevented, and in practice it has been found that syrup, oil or the like may be absolutely cut off.

Fulcrumed upon the pin or axle D is an arm or lever I, preferably formed from a piece of spring wire bent upon itself, as indicated in Figs. 1 and 2. Said lever is provided with an eye J through which the axle D passes, the parts being held in position by a washer K and pin L, or by any other suitable means.

The outer end of one member of the arm I is reduced (see Fig. 4) and somewhat shorter than the other or upper member. Said upper member, as will be seen upon reference to Figs. 2 and 5, is provided with an inwardly-projecting point or finger M which passes into a recess formed in the forward face of the valve. While the spring of the arm would normally retain said finger in the recess and as a consequence hold the valve closely to its seat, in order to provide a proper finish and prevent possible displacement of the finger a sheath N is placed over the ends of the lever, and secured to the outer face of the valve in any suitable manner.

The opposite end of the lever I is bent outwardly and a loop O is formed thereon, see Fig. 3. The laterally projecting end P of a rod Q extends through said loop, the rod passing upwardly through a tubular handle R and being secured at its upper end to a plunger S which works within the upper end of the tubular handle. A spring T, bearing at its lower end upon the lower wall of the handle and at its upper end against the lower face of the plunger, encircles the rod and serves to hold the plunger and rod in their elevated position, thereby bringing the valve to its closed position, or that indicated in Fig. 1.

In order that the parts may be readily assembled, the lower wall U of the handle is provided with a cross slot V (see Fig. 2) which, when the lever I is removed from its fulcrum and the loop has passed off of the end P of the rod, permits said end to be given a quarter turn and withdrawn into the slot, so that the rod, the spring and the plunger may be removed from the handle.

While the rod normally occupies a medial position, as indicated in Figs. 2 and 3, it

may, nevertheless, when released from its connection with the lever I be thrown slightly to one side, so that the end P may be moved into the slot after being given a quarter turn, as above indicated.

It will be noted upon reference to Fig. 5 more particularly that the opening in the member B is elliptical in form, and that the lower portion of said member inclines downwardly. By reason of this curved formation, the valve, which is straight across its lower edge, gradually restricts the opening as the valve is lowered. The beveled or inclined face of the valve extends in a direction opposite to the inclination of the lower face of the member B; hence, when the edge of the valve coincides with the lower edge of the member B there is practically no point upon which any material may lodge.

With the construction above noted it will be seen that the user of the receptacle can grasp the same in one hand, and by placing the thumb upon the plunger depress it and thereby elevate the valve, opening the latter to the desired extent. Immediately the pressure is taken off the plunger, the spring T will elevate the rod and consequently actuate the lever I so as to close the valve. When the valve is in its elevated position it still rests upon the valve-seat and also upon the forward face of the wing E which stands in line with or forms a continuation of the seat, thus preventing the valve from being thrown away from the valve-seat by the spring action of the lever I, as would otherwise take place.

Having thus described my invention, what I claim is:

1. In combination with a can provided with an opening adjacent to its lower end; a valve-seat surrounding said opening and provided with a sharpened lower edge; a valve resting upon said seat, the valve having a knife-edge at its lower portion; a lever fulcrumed upon the can, one end of said lever having operative connection with the valve; a handle secured to the can; a rod extending upwardly through the handle and connected at its lower end to the lever; a plunger carried at the upper end of the rod, said plunger extending upwardly above the handle; and a spring serving to elevate the plunger and rod and thereby to swing the lever into such position that the valve will be closed.

2. In combination with a can provided with an opening adjacent to its lower end; a valve-seat surrounding said opening; a valve resting upon said seat; a lever fulcrumed upon the can, one end of said lever having operative connection with the valve; a handle secured to the can; a rod extending upwardly through the handle and connected at its lower end to the lever; a plunger carried at the upper end of the rod and normally extending upwardly above the handle; and a spring serving to elevate the plunger and the rod and thereby to swing the lever into such position that the valve will be closed.

3. In combination with a can or receptacle provided with an opening; a member forming a valve-seat and secured to the outer face of the can adjacent to said opening; a wing extending upwardly from said member, the forward face of the wing and the outer face of the member which forms the valve-seat standing in alinement; a valve mounted upon said seat; an arm extending laterally from the member; a pin carried at the outer end of said arm; and an operating lever for the valve fulcrumed upon said pin and connected to the valve, said lever being formed of spring material and serving also to hold the valve to its seat.

4. In combination with a can or receptacle provided with an opening; a valve-seat formed adjacent to said opening; a valve mounted upon said seat, the valve being provided with a seat or depression in its outer face; an operating lever fulcrumed upon the can; and a finger extending from said lever and projecting into the seat or depression formed in the valve.

5. In combination with a can or receptacle provided with an opening adjacent to its lower edge; a valve-seat surrounding said opening, the seat being provided with a sharpened edge at the lower portion thereof; a valve resting upon the seat, said valve likewise having a sharpened lower edge; a spring-arm fulcrumed upon the can, one end of said arm being in operative relation with the valve and serving, as the arm is moved, to raise and lower the valve, the opposite end of the arm being bent outwardly and provided with a loop; a handle secured to the can; a rod mounted within the handle, and provided with a lateral armor extension which projects through the loop in the lever, said rod passing through a slot formed in the lower wall of the handle; a plunger secured to the upper end of the rod; and a spring encircling the rod, said spring bearing upon the lower wall of the handle and the lower face of the plunger and thereby serving to elevate the plunger and maintain the valve in its closed position.

6. In combination with a can or receptacle provided with an opening; a member surrounding said opening, the member projecting downwardly and outwardly and having a sharp edge; and a valve mounted upon the outer face of said member and serving to close the opening, said valve being likewise provided with a sharp edge at the lower side thereof, the edge of the valve and sharp edge formed upon the member converging toward each other.

7. In combination with a can provided

with an outlet or opening; a valve-seat; a valve working over said seat, the lower edge of the valve being sharpened or forming a knife edge; a tubular handle secured to the can; a plunger working in the handle; and connections between the plunger and the valve.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ANTON K. SWEEN.

Witnesses:

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N. O. STARKS.