L. W. ASCHEMEIER.

PORTABLE INK BOTTLE.

APPLICATION FILED NOV. 3, 1908.

985,493. Patented Feb. 28, 1911.

Fig. 1

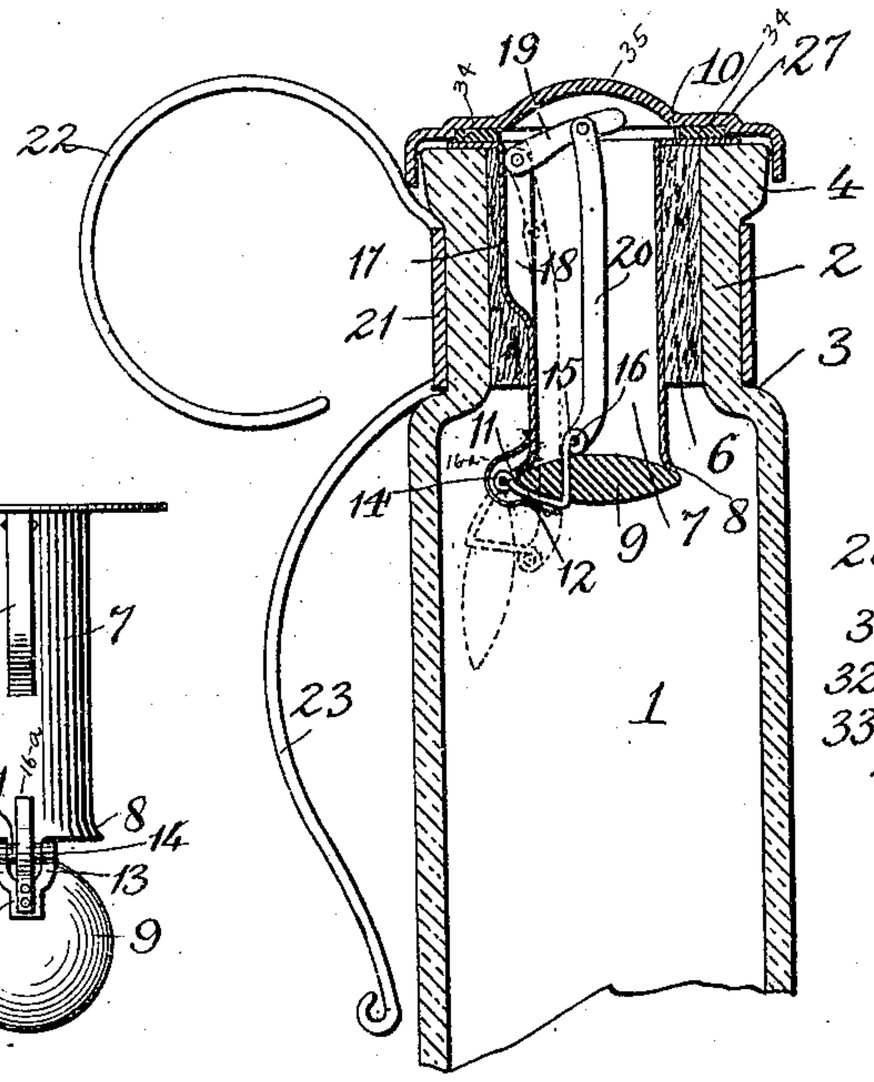


Fig. 4.

Fig. 3

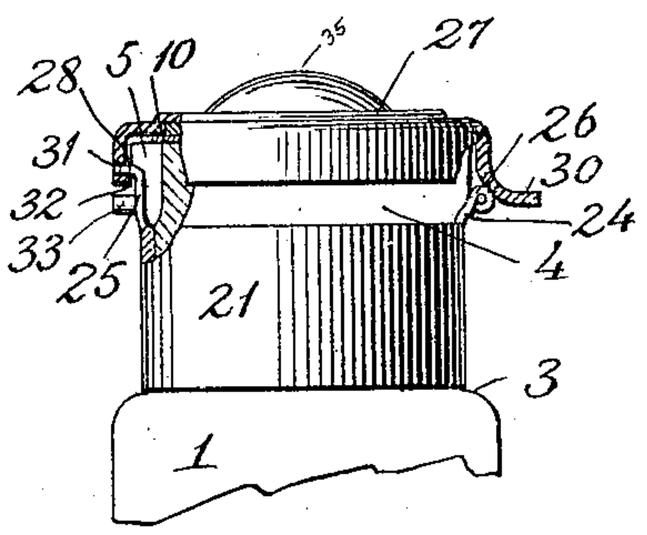


Fig. 2.

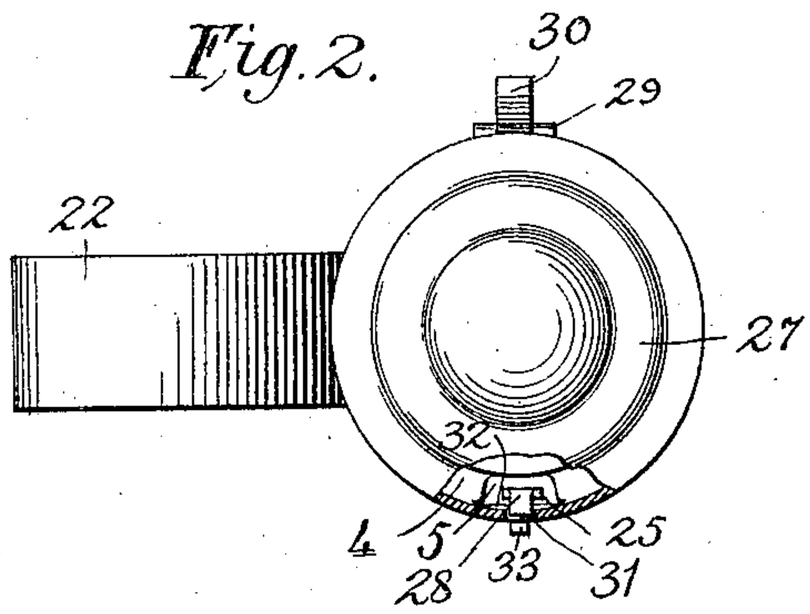
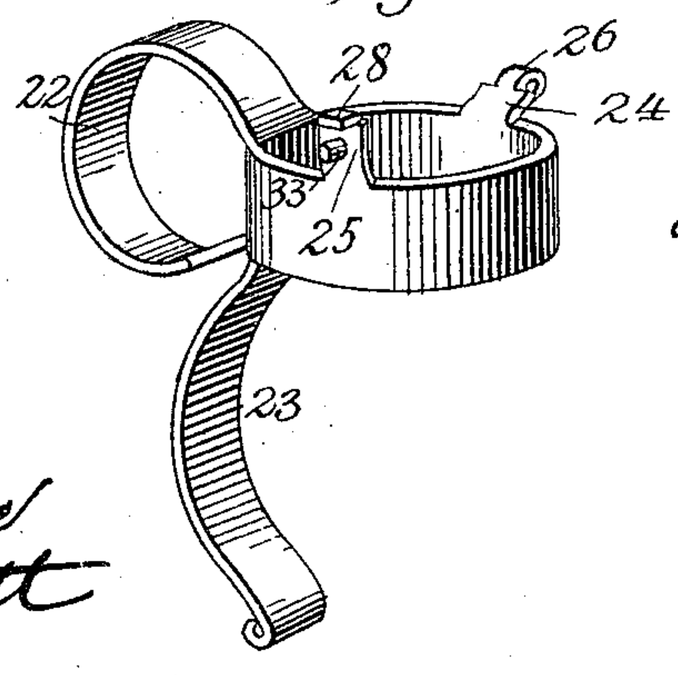


Fig. 5.



Witnesses

S. W. Hawkins

J. R. Bennett

Inventor

UNITED STATES PATENT OFFICE.

LUTHER WESLEY ASCHEMEIER, OF BALTIMORE, MARYLAND.

PORTABLE INK-BOTTLE.

985,493. Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed November 3, 1908. Serial No. 460,819.

To all whom it may concern:

Be it known that I, LUTHER WESLEY ASCHEMEIER, a citizen of the United States, residing in the city of Baltimore, State of Maryland, have invented a new and useful Portable Ink-Bottle, of which the following is a specification.

This invention relates to ink bottles, and has for one object to provide a small receptacle for ink containing a valved closure to prevent ink from being spilled should the bottle be shaken or overturned and which shall be automatically opened by a pen holder when the latter is placed in the neck of the bottle to fill the pen and held open by said pen holder until withdrawn.

Another object of the invention is to produce an ink bottle capable of being carried safely from place to place in a coat or vest pocket, or otherwise, occupying but little space and having means for suspending it from the finger, coat or vest pocket or a buttonhole.

A further object of the invention is to provide a hinged cover or cap for the mouth of the bottle which will completely close the same and provide additional means for preventing the escape of ink during transportation.

With these and other objects in view the invention consists of the novel construction, combination and arrangement of parts hereinafter described and claimed and illustrated in the accompanying drawing, in which—

Figure 1 is a vertical sectional view of the upper part of a bottle with my improvement applied; Fig. 2, a top plan view of the same, a portion being broken away; Fig. 3, an elevation of the neck of a bottle provided with my device with portions broken away to more clearly illustrate the invention; Fig. 4, a detail view in elevation of the valved closure, and Fig. 5, a perspective view of the bottle supporting device.

Similar reference characters are used for the same parts in all the figures.

In the drawing, 1 indicates a bottle of any suitable construction but preferably of the shape shown with a cylindrical neck 2 rising from a shoulder 3 on the bottle and terminating with an exterior flange 4 at its mouth; the flange and neck for a short distance below the bottle mouth are indented or recessed at 5 for a purpose hereinafter described.

Within the neck 2 of the bottle is a stopper 6 preferably of cork, but not necessarily so, provided with a central vertical opening therethrough for a tubular metal passageway 7 flared outwardly at its lower end to form a valve seat 8 for a valve 9 and provided at its upper end with a broad circular flange 10 extending outwardly from the passageway and resting on the flat top of the neck flange 4 and stopper 6. The lower flared end of the passageway 7 is provided on one side with a hinge member 11 from which the valve 9 is suspended by means of a metal strip 12 divided at one end into two fingers 13 the terminals of which are bent into eyes 14 to form the coacting member of the valve hinge. The strip 12 lies close to the underside of the valve 9 for a short distance and then passes upwardly through the valve where it terminates in a rolled end 15 having an opening for a pivot pin 16.

The valve 9 is circular and may be of any desirable shape in cross section, but preference is given to a double convex form such as is shown in Fig. 1, the upper convex side fitting snugly into the valve seat 8 on the passageway 7. The valve 9 is held normally closed by means of a spring 16^a arranged in any convenient position, but represented in the drawing as a flat spring riveted at one end to the strip 12 and bent around the valve hinge so that its free end will bear with suitable tension against the outside of the passageway 7. The valve is opened by means now to be described.

On the same side of the passageway 7 to which the valve 9 is hinged and extending downwardly in a longitudinal direction from the broad flange 10 is a rib 17 formed in the present instance by pressing outwardly the wall of the passageway thereby forming a recess 18 in the rib opening into said passageway. Pivoted within this recess at its upper end is a short lever 19 normally inclined upwardly above the bottle mouth and reaching nearly across the same. Intermediate the ends of the lever 19 a connecting bar 20 is pivoted at one end, its other end projects downwardly into the passageway 7 and is similarly connected to the rolled end 15 of the metal strip 12. When the lever is depressed the valve 9 is forced open, and when released the valve is closed by the spring 16^a. As thus constructed, when it is desired to fill a pen with ink it is introduced into the neck of the bottle with its concave side toward the end

of the lever 19 so that the penholder overhangs the same. If the penholder be now lowered it will strike the end of said lever before the pen point reaches the valve and depress the lever which, through the connecting bar 20, swings the valve downwardly on its hinge so that the pen can enter the bottle sufficiently far to become filled with ink, the penholder at the same time bears on said lever and connecting bar and holds the valve away from the pen point as it enters and is withdrawn from the bottle. The position assumed by the valve and its operating connections when the pen is in the bottle is shown clearly in dotted lines in Fig. 1.

Ink bottles of this type are intended primarily for stenographers, statistical collectors and others, and for the purpose of conveniently holding or carrying such bottles some suitable means must be employed. For carrying out this part of the invention, I place a metal band 21 around the neck of the bottle between the shoulder 3 and the flange 4 and attach thereto at its upper edge a substantially circular ring 22 adapted to fit over the forefinger, and on the lower edge a downwardly curved plate 23 capable of hooking over the pocket of a vest or coat or in a buttonhole of either garment. Besides the ring 22 and the plate 23 the band is also provided on its upper edge with two diametrically disposed tongues 24 and 25, the former tongue 24 having an eye 26 at its terminal end to which an exterior cover 27 is hinged. The other tongue 25 is resilient and has its end bent outwardly at a right angle to form a hook 28 for retaining the exterior cover in closed position. The band 21, ring 22, curved plate 23 and tongues 24 and 25 may be made integral and stamped out of spring metal and afterward bent into shape, securing the band on the bottle neck by solder, rivets or screws. These parts may, however, be made separate and connected together in any desired manner.

The exterior cover 27 is cup shaped, the flange of which extends downwardly over the bottle flange 4 and has at one side a hinge member 29 to be connected by a pin with the eye 26 of the tongue 24. A finger 30 projects beyond the cover hinge to serve as a stop for the cover when raised and limit its movement. Diametrically opposite the cover hinge the cover flange is provided with a slot 31 and a rib 32 below it with which the spring catch or hook 28 engages to hold the cover closed. A button 33 is fastened on said spring catch for convenience in disengaging it from the cover. The top of the cover 27 is recessed on the under side to form a seat for a packing ring 34 which bears on the flange of the passageway 7 when the cover is closed. The central part 35 of the cover is raised to afford room for the end of the lever 19.

Constructed as above described, a simple, safe and convenient ink bottle is produced that will be an acquisition to all such as are compelled to carry ink with them in their business. Whether on the finger or suspended on a garment the bottle is in a convenient position and always sealed except at the immediate time when filling the pen, and it matters not how violently the bottle may be shaken the interior valve prevents the escape of ink.

Having thus described my invention, I claim:

1. An ink bottle provided with a tubular removable stopper, a pivoted closure for the lower end of the same, and pivoted means on the stopper at the mouth of the bottle connected to the closure for automatically opening said closure when said means is depressed.

2. An ink bottle provided with a stopper having an opening therethrough, a valve within the bottle and pivoted to said stopper for closing said opening, means at the mouth of the bottle for opening said valve when depressed, and resilient means for closing the same and holding it closed.

3. An ink bottle provided with a normally closed hinged valve within the bottle, swinging means at the mouth of the bottle, and means connecting said valve to said swinging means whereby the depression of the latter by a penholder will cause the said valve to open and permit the pen to enter the bottle.

4. An ink bottle provided with a neck, a support, a valve hinged to said support within the bottle and held normally in closed position, means at the upper end of said neck connected to said support and to the valve for opening the valve when depressed by the lower end of the pen holder.

5. An ink bottle provided with a tube forming a passageway extending through a stopper, a valve pivoted to the lower end of said tube to open within the bottle, resilient means for normally holding said valve in position to positively close the passageway, a lever pivoted at the upper end of the passageway and projecting partially across the mouth of the same, and a connecting bar between said lever and said valve to open the latter when the lever is depressed.

L. WESLEY ASCHEMEIER.

Witnesses:
S. W. HAWKINS,
J. R. BENNETT.