(No Model.)

C. H. WATKINS, Jr.

STOPPER FOR BOTTLES.

No. 579,619. Patented Mar. 30, 1897.

Fig. 3

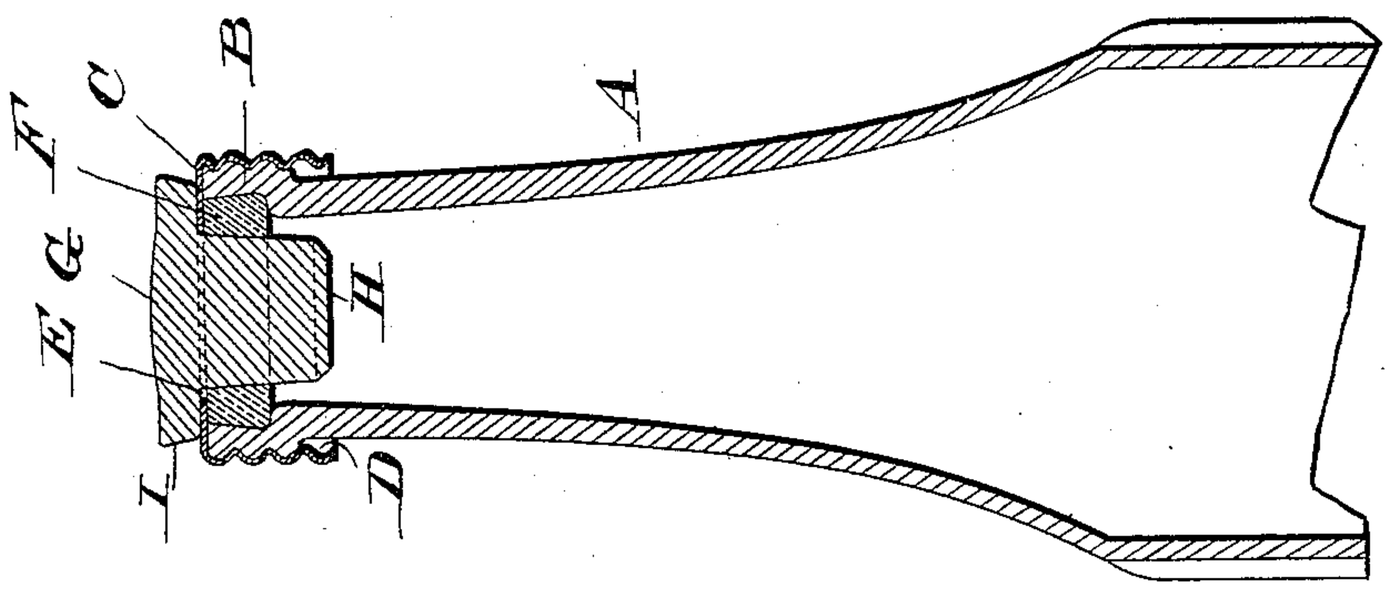


Fig. 2

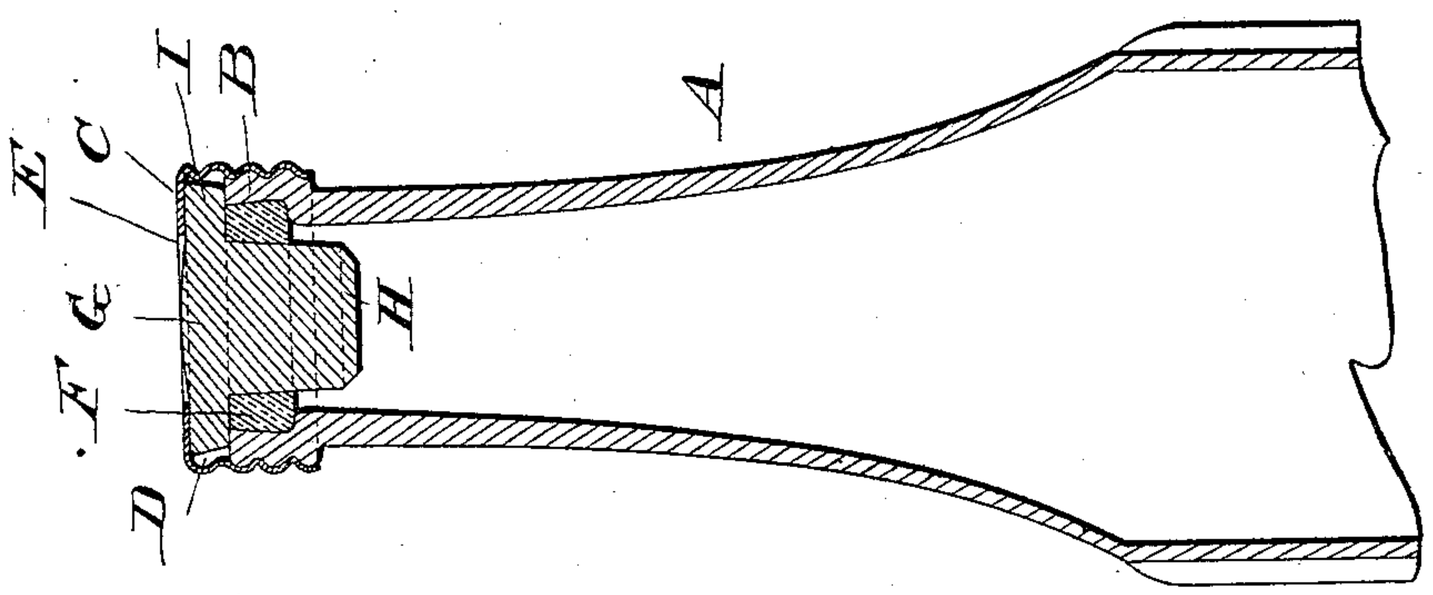
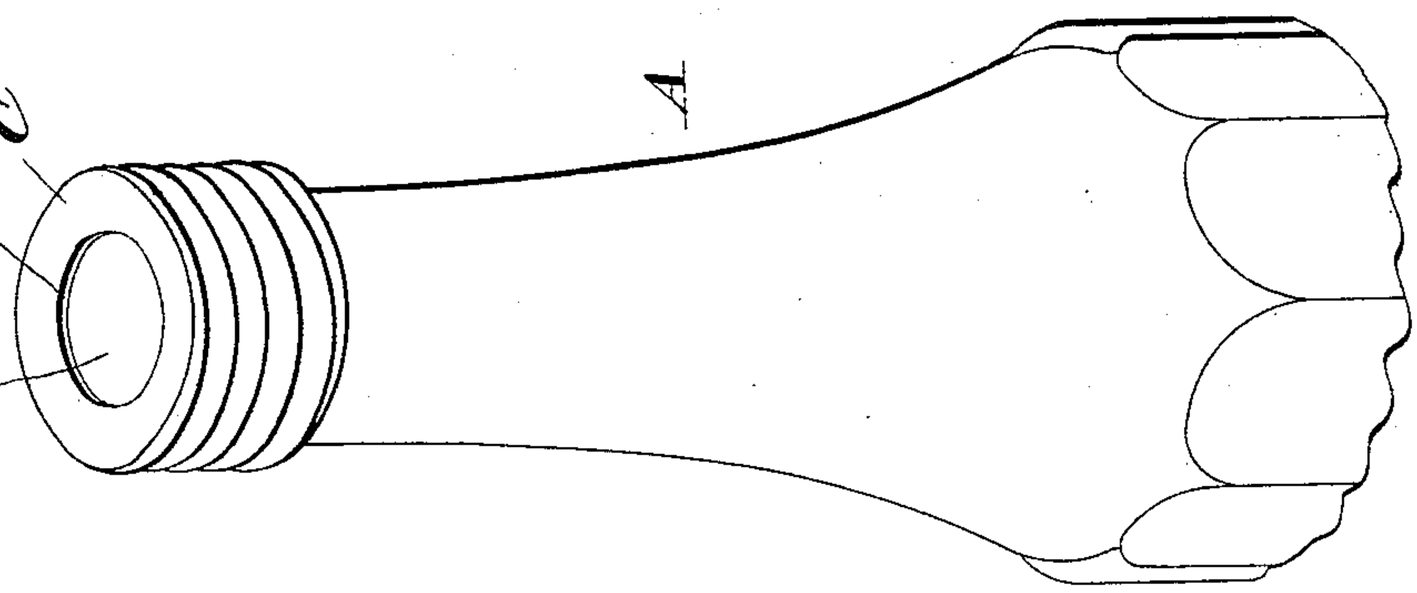


Fig. 1



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STOPPER FOR BOTTLES.

SPECIFICATION forming part of Letters Patent No. 579,619, dated March 30, 1897.

Application filed November 12, 1896. Serial No. 611,847. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. WATKINS, Jr., a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented certain new and useful Improvements in Stoppers and Sealers for Bottles; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in stoppers and sealers for bottles adapted to contain catchup, sauces, &c., wherein the contents are to be partially emptied at intervals, and it is of the kind wherein the same stopper may be used for shipping and for protecting the contents of the bottle while in use. In the usual form of such stoppers a cork having an opening in the center is introduced into the neck of the bottle. This opening is covered by a tightly-fitting glass plug. The object of using the cork is to make a close fit for the plug and to reduce the diameter of the orifice of the bottle, so as to allow of greater exactitude in emptying the contents. When the bottle is shipped, the glass plug is held securely in place by a seal, which upon being broken by the consumer the plug can be removed. This form of stopper is open to objection, for after once the seal is broken the bottle cannot be closed for transportation without being resealed, and to the further objection that while in use the liquid contents will frequently cause the plug to stick to the cork and will hold it with such force that upon the plug being removed the cork will come out with it. Other stoppers have been made wherein a cork is forced into the bottle-mouth and a cap is used screwed over the bottle-mouth. With such devices the cork requires to be removed before the contents of the bottle can be ejected, and since the cork has been tightly secured in place it almost always is badly broken in being extracted. In consequence the cap alone is generally employed in use to effect the stoppering, and this has been found to be objectionable for the reason that the contents of the bottle become contaminated by contact with the cap.

The objects of my invention are to avoid these objections and to produce a stopper which can be securely sealed by means of a screw-cap and at the same time to provide the cork lining for the neck of the bottle with means whereby it cannot accidentally be displaced by the plug sticking to it. These objects I accomplish by providing the neck of the bottle with external screw-threads or other locking devices, which engage with a metallic cap preferably having a circular opening in its center. This opening when employed is slightly larger than and is coincident with an opening in the cork stopper, which latter I prefer to introduce in a novel manner. The glass plug has an enlarged head and is introduced within the cork, the metal cap being screwed over it. This will firmly seal the plug within the cork and prevent the same from being displaced.

When in use and it is desired to empty the contents of the bottle in small quantities at different times, the metal cap and glass plug are both removed and the metal screw-cap replaced and screwed down to close engagement with the cork. The glass plug can then be replaced and passed through the openings in the cap and in the cork and will abut against the cap. Upon the plug being removed it will be impossible to accidentally remove the cork, as it will be held in place by the metal cap.

Broadly speaking, therefore, my invention consists, first, in employing a cap in combination with a plug working in an annular cork, the plug, cap, and cork being separable; second, in employing a cap in combination with a plug working in an annular cork, said plug having a flat or disked head and said cap having an opening therein whereby the cap may be placed above or below the head of the plug, and, third, in securing an annular cork in a bottle-neck in a novel manner.

In order to better understand the nature of my invention, attention is directed to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view of the neck of a catchup-bottle made according to my invention. Fig. 2 is a vertical sectional view

of the same with the stopper in place for transportation, and Fig. 3 is a similar view with the parts in place for use.

In all of the several views like parts are indicated by the same reference-letters.

In the drawings, A is the bottle-neck, having a raised screw-threaded portion B adjacent to its upper edge.

C is the metallic cap, preferably made of tin of the shape shown, having internal screw-threads D upon its sides and a circular opening E at its top. The screw-threads of the cap engage with the threads on the neck of the bottle to hold the two tightly together.

F is a ring of cork or similar material tightly forced within the neck of the bottle, having an opening therein slightly smaller than the opening E in the cap. The stopper G is formed, preferably, of glass or of any other suitable material and has a shank part H and an enlarged head or flange I. The top of the flange may be plain or ornamented or may contain directions or advertisements, as desired. The shank H of the plug is of such a size and shape as when introduced within the opening in the cork will tightly close the same.

When the bottle is packed for shipment, the plug is introduced within the cork, and the metal cap is screwed down over all tightly, forcing the plug within the cork and absolutely preventing the escape of the contents of the bottle.

When the bottle is to be used, the cap and plug are both removed and the cap screwed down until it is in close engagement with the top of the cork. The plug is then replaced, passing through both the openings in the cap and in the cork.

It will be seen that upon removing the plug, no matter how much the same sticks to the cork, the latter cannot be accidentally removed from the bottle, as the top of the cap overlaps the cork and effectively holds the same within the neck of the bottle.

By preference the cork stopper is introduced and held in place by providing the bottle-neck with a recess near its mouth on the interior, in which recess the cork will be seated, as clearly illustrated in Figs. 2 and 3. This recess may be formed with the bottle during the blowing of the same in the mold.

Having now described my invention, what I claim as new therein, and desire to secure by Letters Patent, is as follows:

1. A stopper for bottles, consisting of an annular cork in the bottle-mouth, a plug removably engaging in said cork and having a flanged head, and a cap separate from the plug and cork, and engaging the bottle-mouth and forced down upon said head, substantially as set forth.

2. A stopper for bottles, consisting of a portion having an opening therein permanently secured within the neck of the bottle, a plug entering said opening, and a removable cap having an opening within its top, such cap being capable of being placed either above or below said plug, substantially as set forth.

3. A stopper for bottles, consisting of a portion having an opening permanently secured within the neck of the bottle, a plug entering said opening, and a cap screw-threaded onto the bottle-neck and having an opening therein within its top, such cap being capable of being placed either above or below said plug, substantially as set forth.

4. A stopper for bottles, consisting of a cork secured within a recess formed on the interior of the bottle, said cork having an opening therein, a plug entering said opening and formed with a flange, and a cap screw-threaded onto the bottle-neck and having an opening therein within its top, such cap being capable of being placed either above or below the flange of said plug, substantially as set forth.

This specification signed and witnessed this 12th day of October, 1896.

CHARLES H. WATKINS, JR.

Witnesses:
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