

(No Model.)

I. POMEROY.

BOTTLE TOP.

No. 373,849.

Patented Nov. 29, 1887.

Fig. 1.

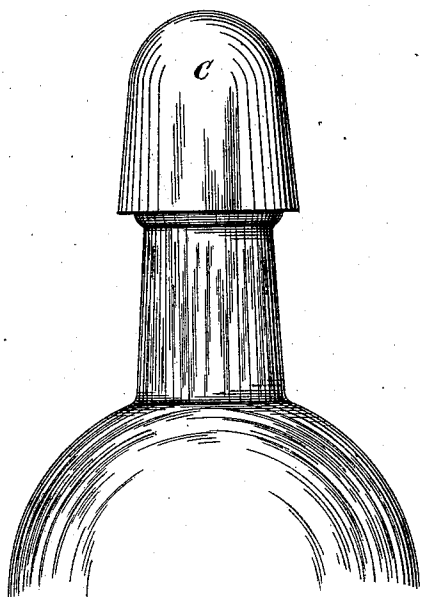


Fig. 2.

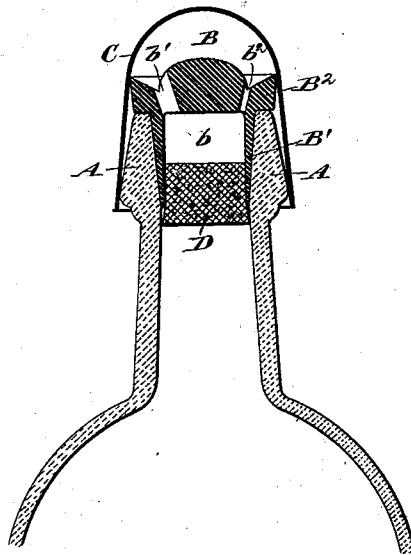


Fig. 3.

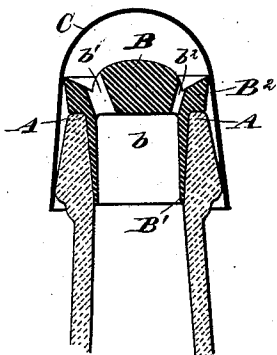


Fig. 4.

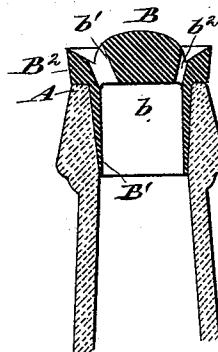
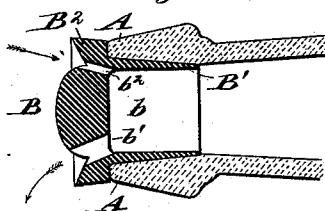


Fig. 5.



Witnesses:

Charles R. Sharle,
H. A. Johnston.

Inventor:

Isaac Pomroy
by his attorney
Thomas D. Jones

UNITED STATES PATENT OFFICE.

ISAAC POMEROY, OF NEWARK, NEW JERSEY.

BOTTLE-TOP.

SPECIFICATION forming part of Letters Patent No. 373,849, dated November 29, 1887.

Application filed April 2, 1887. Serial No. 233,347. (No model.)

To all whom it may concern:

Be it known that I, ISAAC POMEROY, of Newark, in the county of Essex and State of New Jersey, have invented a certain new and useful Improvement Relating to Bottle-Tops, of which the following is a specification.

The bottle may be of glass in the ordinary form; but care must be taken that the neck is not contracted below the portion in which the stopper usually applies. I provide a main part or mouth-piece of bass-wood or other sufficiently close and slightly-yielding material, which is forced into the bottle to about the ordinary extent, and bore or otherwise produce a large hole in the center leading from the inner end nearly but not quite to the outer end. This hole is so large that it reduces the inner end of the main part to a thin annular rim which is capable of yielding, and thus facilitates making a tight joint between its exterior and the interior of the bottle-mouth. This hole is plugged by a tight-fitting cork applied in the reverse position to the ordinary. When the main part is inserted in the bottle with the cork in its interior, the large end of the cork is presented inward toward the contents of the bottle. This cork, while in place, completely closes the mouth and renders it practicable to hold the bottle with its contents in all positions, and ship the bottle to any distance without spilling or evaporating. At a later period, when the bottle is to be made ready for use, the cork is removed. This is effected by temporarily drawing out the main part, removing the cork, and replacing the main part. From the outer end of the large concentric hole there are two holes slightly divergent and communicating through the head of the device with the external atmosphere.

The invention is intended more particularly for ink, blacking, mucilage, and analogous material of which only small quantities are required at any one time. In pouring out these quantities the main part is not removed, but the bottle is tilted into such position that the liquid flows out through one of the outer passages, while the air to supply its place enters through the other. To insure the smoothest and most reliable action the hole for the escape of the liquid must be considerably larger than that for the entrance of the air. A close-fitting

cap is applied over the entire bottle-mouth, which is temporarily removed when the bottle is to be used, and carefully replaced again after each use.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is a side elevation. The remaining figures are central vertical sections. Fig. 2 shows the bottle securely locked for storage or transportation. Fig. 3 shows the device after the reversed cork has been removed, the parts readjusted, and the cap applied. Fig. 4 shows the same with the cap removed ready to pour out the contents on properly tilting the bottle. Fig. 5 shows the same tilted to pour out the contents.

Similar letters of reference indicate corresponding parts in all the figures where they occur.

A is the mouth of a glass bottle, smoothly tapered on its exterior, as shown.

B is what I term the "main" part, certain portions being designated, when necessary, by additional marks, as B', &c.

B' is a thin rim which extends into the bottle. In its interior is a large cavity, b.

B² is a stout head closing the outer end, except as it is perforated by the two holes b' b². The hole b' is larger. The periphery of the head B² is a smoothly-finished collar of a diameter corresponding to the exterior of A. A removable cap, C, applies tightly around B², and also fits tightly on the slightly-tapered exterior of A.

D is an ordinary cork sufficiently smaller than the bottle-mouth A, to allow its being moved easily inward and outward when in place in the main part B. It is inserted therein before B is placed in the bottle, and constitutes, with the latter, a tight stopper.

The bottles with their contents are sent from the manufactory with the cork D in place. When the bottle is at its destination, the user first takes off the cap C, then temporarily draws out the main part B, and removes the interior cork, D, therefrom, which has now fulfilled its function. The main part being replaced, the ink or other contents of the bottle may be poured out through the aperture b', while the

air enters through the aperture b^2 . After each use the cap C is applied; but the cork D is never again required.

My device is superior to any before known to me, especially in providing for the working of thick fluids or semi-fluids. There have been devices for analogous purposes; but they were complicated and expensive, and provided but contracted passages for the flow of the material. 5
10 My device is cheap and easily operated. It presents no metal to the contents of the bottle. It is absolutely tight during the first period, and affords liberal passage for the contents of the bottle when they are to be made available.

Instructions for the proper opening of the bottle and preparation for use may be printed on the label.

Modifications may be made in the details. I can attach sponge to the head B^2 , using any of the ordinary means for securing the same, and simply providing a sufficiently capacious cap C to allow therefor. 20

Parts of the invention can be used without the whole. Instead of the two apertures $b' b^2$, I can pour out small quantities through a single aperture, which may be either in the center 25

of the head or in the position shown for one of the present apertures. The two apertures $b' b^2$, arranged as shown, allow the liquor to be poured in a smooth continuous stream through the larger aperture, b' , while the air enters through the smaller, b^2 , and the operation may be continued for any period. 30

I claim as my invention—

1. The bottle-mouth A and the main part B, with its annular rim B' and cork D lying in the reverse of the ordinary position, all combined and arranged to serve as herein specified. 35

2. The main part B, having a head, B^2 , with the two apertures $b' b^2$, and the rim B' and cavity b , in combination with the plug D, set in the main part in the reverse of the ordinary position, and with the bottle-mouth A, and cap C, all arranged to serve as herein specified. 40

In testimony whereof I have hereunto set my hand, at New York city, this 1st day of April, 1887, in the presence of two subscribing witnesses. 45

ISAAC POMEROY.

Witnesses:

CHARLES R. SEARLE,
H. A. JOHNSTONE.