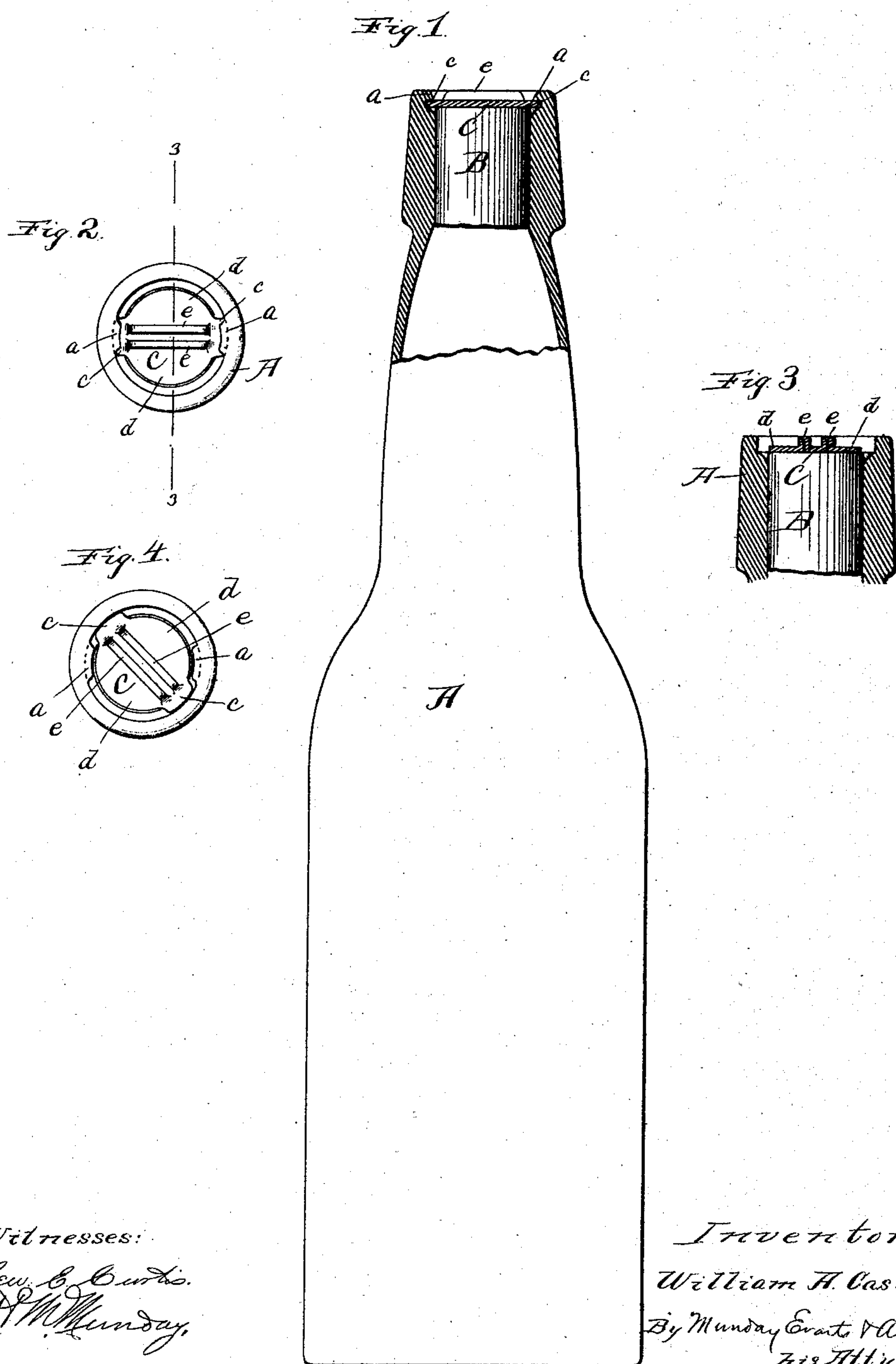


(No Model.)

W. A. CASWELL.
BOTTLE STOPPER.

No. 384,824.

Patented June 19, 1888.



Witnesses:

Sew. C. Curtis.
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UNITED STATES PATENT OFFICE.

WILLIAM A. CASWELL, OF CHICAGO, ILLINOIS.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 384,824, dated June 19, 1888.

Application filed February 20, 1888. Serial No. 264,588. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. CASWELL, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Bottle-Stoppers, of which the following is a specification.

In this invention I have endeavored to do away with the wires employed to hold the cork in wine, beer, and medicine bottles. By its use I am also enabled to employ cork in all cases in which that material is preferable to rubber.

The invention is hereinafter fully explained, and set forth in the claim.

In the drawings, Figure 1 is an elevation, partly in section, of a bottle embodying my invention. Fig. 2 is a plan showing the cork locked within the bottle. Fig. 3 is a vertical section on the line 3 3 of Fig. 2. Fig. 4 is a plan showing the parts in the unlocked position.

In said drawings, A represents the bottle, the orifice of which is provided at opposite sides with horizontal internal lips or projections, *a*.

B is the cork, which, as shown, is pressed down into the bottle until its top lies below said lips *a*.

C is a metal plate of such dimensions as to enable it to span the orifice and enter under the lips *a* and thus be kept by the latter. To insert it under such lips, it is dropped within the orifice and upon the cork and then turned upon the axis of the bottle until its points *c* engage with the lips.

The plate C is formed of flat metal and cut from a sheet thereof. It may have wings *d*, which give it the same outline as the cork, and thus enable it to act as a metal cap to the latter; but it is very necessary that it be provided with some means whereby to turn it, as it must be turned both in locking and unlocking, and for this purpose I stamp up in the body of the plate one or more raised ribs, *e*, which are adapted to be engaged by a tool and to receive from such tool the power necessary to turn the plate. The turning may have to be done while the cork is strongly

forced up against the plate by the pressure from within the bottle, and hence these projections or ribs should be strong. Where two parallel ribs are present, as shown, an ordinary screw-driver can be used by inserting its point between them. Another advantage attending the use of the stamped ribs is that they stiffen the plate and permit the use of quite thin material.

The lips *a* are located immediately within the mouth of the bottle, and should not project within the stopper-passages, so as to interfere with the entrance of the stopper; nor should they be set any farther back of the passage than is necessary, as that would necessitate the use of larger retaining-plates, and probably of heavier ones. It is also desirable that the lips should be short, instead of continuous, as that renders the bottle more easy of manufacture and facilitates the insertion and release of the retaining-plate.

The orifice above the retaining-plate may be filled with wax or composition, in the usual manner, to render the bottle more secure against leakage; but the cork needs no additional fastening to hold it in place. The retaining-plates, being very inexpensive, can be thrown away with the cork, to which they need not be attached, however.

In addition to the total saving of the wire heretofore customarily employed, which is a very considerable item in the expense of putting up liquors, &c., is the saving in the corks themselves, which by my invention can be made very much shorter than the usual length, and it also avoids all necessity for the use of tin-foil to cover the wires.

I claim—

The combination, with the bottle having lips *a* and the cork or stopper B, of a metal retaining-plate cut from sheet metal and having one or more ribs or projections stamped in its body portion and furnished with points *c*, substantially as specified.

WM. A. CASWELL.

Witnesses:

H. M. MUNDAY,
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