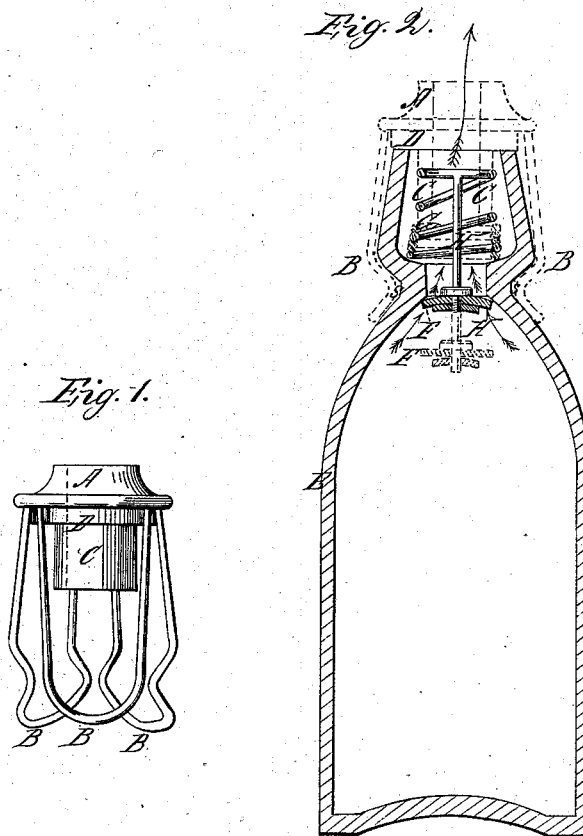


J. Matthews Jr.

Bottle Stopper.

N^o 48,422,

Patented June 27, 1865



Witnesses.

Henry T. Brown
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John Matthews Jr.

UNITED STATES PATENT OFFICE.

JOHN MATTHEWS, JR., OF NEW YORK, N. Y.

IMPROVED INSTRUMENT FOR OPENING BOTTLES.

Specification forming part of Letters Patent No. 48,422, dated June 27, 1865.

To all whom it may concern:

Be it known that I, JOHN MATTHEWS, JR., of the city, county, and State of New York, have invented a new and Improved Instrument for Opening the Stoppers of Bottles and other Vessels; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side view of the instrument. Fig. 2 is a central vertical section of a bottle closed by means of an inner valve, and shows the application of my instrument, which is represented in red outline.

Similar letters of reference indicate corresponding parts in both of the figures.

The object of this invention is to provide for the opening of such stoppers as are applied within bottles or other vessels and closed from the inside either by means of a spring or by the pressure of the gas evolved from the liquid contents of the vessel or with which the said contents have been mechanically charged, or by any other means.

The invention consists of a tube or other device of suitable size and form to enter the mouth of the bottle or other vessel and press the stopper inward away from its seat without interfering materially with the ingress or egress of the liquid, and one or more attached clasps or other devices to operate against the exterior of the bottle or other vessel in such manner as to serve both as a guide to keep the tube or other internally-acting device in place and as a means of holding it against the pressure by which the stopper is closed when the opening-instrument is removed from the bottle or vessel.

The instrument may be made in a variety of forms; but it will be sufficient for the illustration of my invention to represent by drawings and describe that form which I at present consider adapted for the most extensive and general use, and I will now proceed to describe it with reference to the drawings.

To a metallic cap-piece, A, of a circular form, is secured, by riveting or otherwise, the elastic

caps or clips B B B, which are made either of wire or steel plate. The said cap-piece has a central opening, to which is attached a tube or hollow boss of any hard, durable, and water-proof material—such as vulcanized india-rubber or gutta-percha—of an external diameter that will just allow it to pass loosely into the neck of the bottle. Through this tube the liquid passes when being poured from the neck of the vessel which contains it, and any leakage which would occur from the liquid passing along the sides of this center piece and out between the mouth of the bottle and the lower surface of the cap A is prevented by a soft-rubber packing-ring, D, which forms a water-tight joint between the mouth of the bottle and the cap A when the instrument is applied to open the stopper of a bottle, as shown by the red outline in Fig. 2.

In order to open a bottle closed by an inwardly-opening valve, such as is represented in section in Fig. 2, the instrument—the cap being uppermost—is forced downward over the neck of the bottle E, the clasps, clips, or springs B B B spring apart until they clear the upper portion of the neck of the bottle, and the portions of the springs which are bent toward the center enter the depression *s* of the bottle's neck and hold the valve F open by the hollow center pushing against the helical spring G', which is fastened to the valve-stem H. The contained liquid can then be poured out, or, if the vessel is empty, the same may be filled.

In order to allow the valve to close, the instrument is withdrawn and the valve is brought to its seat again by the spring. This bottle-opener entirely obviates the necessity of the person opening the bottle holding the valve in that position against the pressure of the gas and the sustaining-spring G so long as he desires the liquid to run from the bottle, for the clasps, clips, or springs not only hold the tube C or its equivalent against the valve or stopper, but in case of the said tube or equivalent not being of a form to fit the neck of the bottle they serve as guides to keep it in such position as will not interfere with the filling or pouring.

The clasps by which the opener is attached to the bottle may be constructed and applied to operate upon any other portion of the bottle than the neck—as for instance, to hook over the bottom.

The cap-piece may be of a form to fit over the exterior of the bottle and serve as the guide to keep the tube C or its equivalent in its place in the neck, in which case a single clasp or hook attached to the neck would serve to hold the instrument on the bottle.

What I claim as new, and desire to secure by Letters Patent, is—

1. An instrument for opening and holding open the inwardly-closing stopper of a bottle, consisting of an internally-operating device for

pressing back the stopper from its seat and an attached externally-operating means of holding the said internally-operating device in position to keep the stopper open, substantially as herein specified.

2. The combination of the collar A, tube or hollow hub C, elastic packing-ring D, and spring clasps or clips B B, substantially as and for the purpose herein specified.

JOHN MATTHEWS, JR.

Witnesses:

HENRY T. BROWN,
GEO. W. REED.