E.R. Milbur,

Nº47,483,

Bottle Stopper, 3, Fig. 1 Patented Apr. 25, 1865

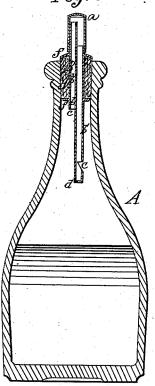


Fig. 2

Witnesses:

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## UNITED STATES PATENT OFFICE.

EDWARD R. WILBUR, OF NEW YORK, N. Y.

## IMPROVED BOTTLE-STOPPER.

Specification forming part of Letters Patent No. 47,482, dated April 25, 1865.

To all whom it may concern:

Be it known that I, EDWARD R. WILBUR, of the city, county, and State of New York, have invented a new and useful Improvement in Bottle-Stoppers, called by me a "Coot-Vent;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which-

Figure 1 is a view of a longitudinal section of an apparatus for stopping or corking bottles, made and applied according to my invention. Fig. 2 is a perspective view of the mouth of a bottle with my stopper applied

thereto.

Similar letters of reference indicate like

parts.

This invention consists of a bottle-stopper which is made with a passage for air to enter the bottle as liquid escapes therefrom, and which I have called a "coot-vent" because when liquid is escaping from a bottle or jug, which has no separate inlet-passage for air, the noise made by the regurgitation of the liquid as the pressure of the air overcomes the weight of the escaping liquid re-resembles the sound of the word "coot."

A is a bottle to which I have in this instance applied my invention, for the purpose of illustrating it. To the mouth of the bottle I fit a cork, g, or some other suitable substance, through the center of which I pass a tube. B. The tube and the cork are held to each other by means of circular flanges or caps f, which project from the sides of the tube and inclose the cork between them, the upper flange being rounded, as seen in the drawings, or it may be made flat. The bottom of the tube is closed, save that a small hole, d, is made in its edge, and its top, which rises out of the bottle above the cork is open, and when the bottle remains at rest it is covered by a movable cap, a. The tube B is of different diameters and of irregular shape. The part which is greatest in diameter is mostly contained within the body of the cork, and is divided into two parts, b'  $b^2$ , by the longitudinal diaphragm b, which is continued to the top of the tube, and also to its bottom, the part b' extending upward a little ways above the top of the cork, where it opens into the air, as at h, and also extending downward into the neck of the bottle where an opening,

c, is made in its side. The other division or part  $b^2$  extends above the cork a considerable distance beyond the opening h of the division b', its mouth being designated by the letter g'.

The cover a is of such a length as to inclose the whole of the tube above the flange f, thus shutting the openings g' and h of both the divisions. The division  $b^2$  terminates at e a little ways below the cork. The lateral opening c in division b' is on that side of the division which is farthest from the division  $b^2$ , so that when division  $b^2$  is the lowest, as when the bottle is laid on its side, the opening c will open upward or be upon the highest side of its division of the tube.

The operation of the apparatus is as follows: When the liquid contents of the bottle are to be poured, the cap a is removed and the bottle is turned over with the division  $b^2$  of the tube lowest, when the liquid will enter it through its inner end, e, and escape at its outer end, g'. The liquid will not regurgitate during the operation because air will enter the bottle through division b' of the tube B by entering it at h and escaping therefrom at the lateral opening c. Thus a stream of air is constantly passing into the bottle to fill up the place of the escaping liquid.

By means of this construction of a stopper I overcome the difficulty of pouring liquids from a vessel through its mouth or neck, and prevent loss by spilling, which usually occurs in pouring when no provision is made for supplying air to the vessel. The stream which issues from the division  $b^2$  is constant and the quantity of liquid to be poured can be therefore better regulated than when it is suffered to flow with irregularity and violence.

The object of the orifice d in the bottom of the air-division b' is to allow any liquid which might by accident get in that division to escape into the bottle.

This device is applicable to all vessels which are emptied from their mouths, as vials, bottles, jugs, demijohns, and the like. It will therefore be very useful to apothecaries as well as to householders.

I claim as new and desire to secure by Letters Patent-

The bottle-stopper above shown, constructed and applied substantially as described. EDWARD R. WILBUR.

Witnesses:

M. M. LIVINGSTON, C. L. TOPLIFF.