

# UNITED STATES PATENT OFFICE

BERNARD DREYFUSS, OF NEW YORK, N. Y.

## BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 547,878, dated October 15, 1895.

Application filed March 13, 1895. Serial No. 541,527. (No model.)

*To all whom it may concern:*

Be it known that I, BERNARD DREYFUSS, residing at New York city, in the State of New York, have invented a new and useful Improvement in Bottle-Stoppers, of which the following is a full and exact specification.

My invention relates to that class of stoppers which are used for bottles which it is desired to refill after once having been emptied of their contents and by means of which a bottle may be closed, so as to become airtight, and more particularly to that kind of stoppers in which an elastic material is combined with a more solid substance to close the aperture of the bottle. I am aware that there have been a number of devices intended for this purpose; but they are open to the objections that from their arrangement of the elastic packing it is soon worn out or that so much of the elastic material, as rubber, is presented to the action of the fluid that sulphur or other material in the composition of the rubber or other packing is apt to affect the taste of the liquid. My invention reduces the exposed surface to a minimum and at the same time affords a certain and durable packing. To accomplish this, I have a solid stopper made, preferably, of porcelain or other suitable material and provided with an elastic ring or packing adjusted at the lower end. This stopper is fastened to the bottle by means of any of the well-known wire devices, by means of which it is pressed firmly into the neck of the bottle.

In the drawings, Figure 1 shows a side view of my stopper, in which A is the body of the stopper, provided with the cone-shaped end K, which terminates in the button C. B is the rubber ring, which is slipped over the end and fits into the recess which forms the cone-point. The interior surface of the rubber ring is shaped to correspond to the surface K. O is the opening through which the wire H passes, by means of which the entire stopper is pressed down into the opening of the bottle.

Fig. 2 is a cross-section of Fig. 1 at 2 2 and showing the same parts.

Fig. 3 shows a modification of the shape of the cone-point to curved sides K'.

Fig. 4 shows another form of elliptical opening O', the ends of which are countersunk or beveled, as shown in the previous figures, in which the ellipse is placed transversely to the stopper, and a depression E provides a means by which the wire H is brought to and retained in the center of the stopper.

Fig. 5 shows a cross-section of Fig. 4.

In all the figures like letters represent like parts.

The action of my invention is simple. As the wire mechanism presses the stopper into the neck of the bottle, the rim fits into the recess I of the rubber ring B and, with the lower part of the rubber, completely closes the opening of the bottle. It will be seen that there is no friction on the portion of the ring which presses against the end of the bottle-neck, but only a direct pressure, so that there is little or no wear on the rubber, and at the same time the porcelain button so nearly covers the bottom of the ring that only the very narrow strip around it will be brought into contact with the fluid.

Having thus set forth my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The combination in a bottle stopper of a solid body having in its upper portion an opening in the form of an ellipse, the ends of which are countersunk or beveled and are provided with a depression E, the whole adapted to receive a fastening wire, and having a square recessed shoulder above a conical bearing, a conical bearing adapted to receive and distend a rubber packing, a circular button formed on the end of the said conical bearing and made integral with said stopper, and a rubber ring or packing adapted to fit upon said cone and against said shoulder and itself having a recessed shoulder, suitable for the reception of a bottle rim, all substantially as and for the purpose set forth.

BERNARD DREYFUSS.

Witnesses:

PALMER COOLIDGE,  
GEO. COOPER DENNIS.

(No Model.)

B. DREYFUSS.  
BOTTLE STOPPER.

No. 547,878.

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FIG. 1.

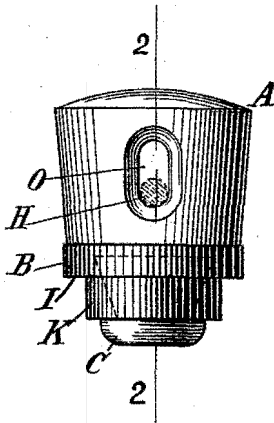


FIG. 2.

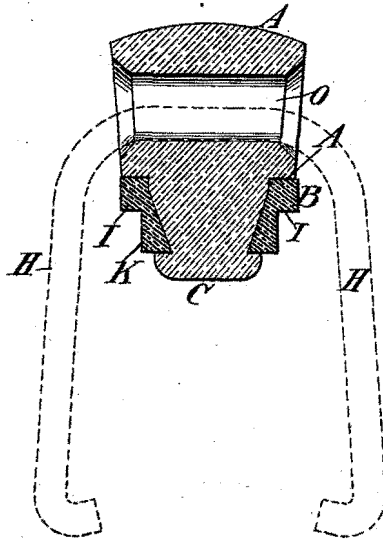


FIG. 3.

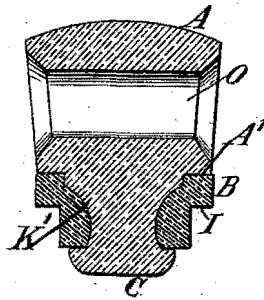


FIG. 4.

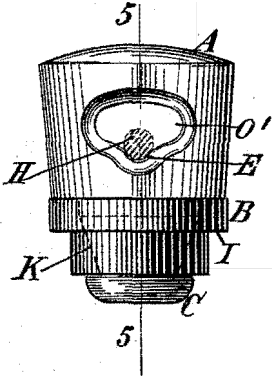
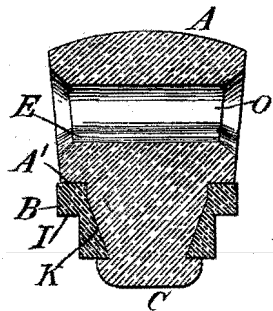


FIG. 5.



Witnesses:

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