

(No Model.)

H. R. MELSTER.
BOTTLE STOPPER.

No. 596,374.

Patented Dec. 28, 1897.

FIG. 1.

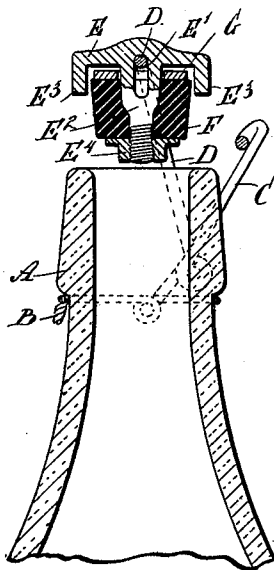


FIG. 2.

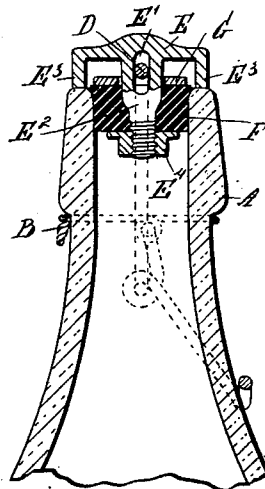


FIG. 5.

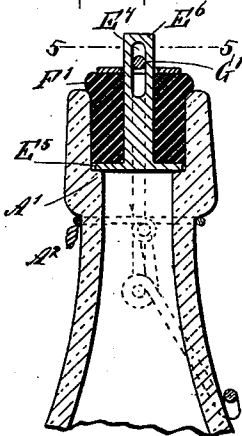


FIG. 3.

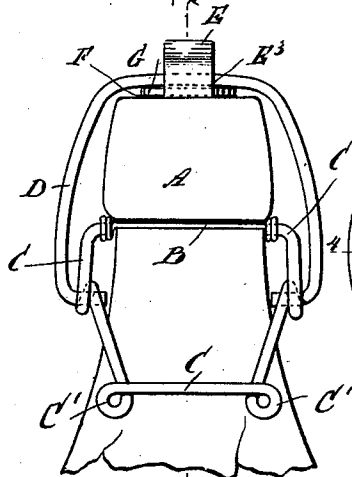
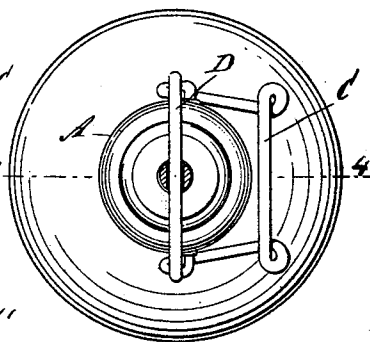


FIG. 4.



WITNESSES:

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HERMAN R. MELSTER, OF WHITEWATER, WISCONSIN.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 596,374, dated December 28, 1897.

Application filed May 28, 1897. Serial No. 638,542. (No model.)

To all whom it may concern:

Be it known that I, HERMAN R. MELSTER, of Whitewater, in the county of Walworth and State of Wisconsin, have invented a new and Improved Bottle-Stopper, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved stopper for bottles, jars, and like vessels, and arranged to permit of hermetically sealing the neck of the bottle in a very simple and effective manner.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement as applied and in an open position. Fig. 2 is a similar view of the same in a closed position, the section being on the line 2 2 of Fig. 3. Fig. 3 is a front elevation of the same. Fig. 4 is a sectional plan view of a modified form of the improvement on the line 5 5 of Fig. 5, and Fig. 5 is a sectional side elevation of the same on the line 4 4 of Fig. 4.

On the neck A of the bottle, jar, or other vessel is secured the usual neck-wire B, on which is fulcrumed a lever C, carrying a bail D, the middle portion of which extends through a vertically-disposed elongated slot E', formed in a yoke or support E, having depending lugs E³, adapted to rest on the top edge of the bottle-neck, as plainly indicated in Figs. 2 and 3.

From the under side of the yoke E, and preferably from the middle thereof, depends a pin or rod E², on which is fitted an elastic plug F, adapted to pass into the mouth of the bottle and expand therein, so as to hermetically seal the neck of the bottle, as hereinafter more fully described.

The bottom of the plug F is engaged by a nut E⁴, screwing on the lower threaded end of the rod or pin E², and the top surface of the said plug is engaged by a washer G, over the top surface of which extends the middle portion of the bail D.

When the several parts are assembled and

the lever C is in an uppermost position, as shown in Fig. 1, then the yoke E is supported from the bail, and as the plug F is carried by the said yoke the latter extends over the mouth of the neck of the bottle, as indicated in the said figure. When the operator swings the lever C downward, then the plug F passes into the mouth of the bottle and the lugs E³ of the yoke E seat themselves on the top edge of the neck, and upon a further downward swinging motion of the lever C into a final locked position, as indicated in Figs. 2 and 3, the middle portion of the bail D presses on the washer G, so as to compress the plug F within the neck of the bottle, to expand the plug, and thereby hermetically seal the mouth of the bottle.

It is understood that the compression and expansion of the elastic plug F take place after the yoke E is firmly seated on the neck of the bottle, and the middle portion of the bail D is free to move downward in the slot E' of the yoke E after the latter is seated and held in a fixed position to permit the said bail to press on the washer G and compress the plug F to expand the same, as above explained, it being understood that the bottom of the plug is held stationary on the nut E⁴.

In opening the bottle the lever C is swung upward, so as to first release the plug F and washer G to allow the plug to contract, and then the middle portion of the bail in moving against the upper wall of the slot E' finally lifts the yoke E, and with it the plug F, so that the latter passes out of the neck of the bottle, and the stopper can now be swung to one side to allow of pouring out the contents of the bottle.

The pin E² is preferably reduced at its lower end, as plainly shown in Figs. 1 and 2, to permit of increasing or decreasing the expansion of the rubber plug F on screwing the nut E⁴ up or down on the threaded end of the pin. By this arrangement the diameter of the plug F can be adjusted according to the size of the mouth of the bottle. The U-shaped lever C is preferably formed with extra twists or eyes C' to permit of a better hold on the lever by the operator for more conveniently opening and closing the bottle.

As illustrated in Fig. 5, the yoke E⁵ is in the form of a disk and adapted to be rested

on an annular shoulder A' within the neck A² of the bottle. The pin E⁶ in this case extends upwardly, and on it is held an elastic plug F', adapted to be compressed by a bail G' after the yoke is seated. The outer end of the pin E⁶ is provided with a slot E⁷ for the bail, to support and carry the yoke.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A bottle-stopper, comprising an elastic plug, and a yoke adapted to be seated on a bottle-neck and provided with a projecting pin extending through the plug and having a longitudinal slot through which a bail loosely passes above the plug, substantially as described.

2. A bottle-stopper, comprising a yoke adapted to be seated on the bottle-neck and provided with a projecting pin having a longitudinal slot through which a bail is adapted to be passed, and an elastic plug held loosely on the said pin between the bail and a stop on the pin, substantially as described.

3. A bottle-stopper, comprising a yoke provided with depending lugs adapted to rest on the top of the bottle-neck, and with a pin depending from the center thereof, said pin being longitudinally slotted to receive a bail, and provided with a stop at its end, and an elastic plug held loosely on the pin between the bail and the stop at the end of the pin, substantially as described.

4. A bottle-stopper comprising a yoke provided with depending end lugs adapted to rest on the top of the bottle-neck and with a pin depending from its central portion, said pin being provided with a longitudinal slot, through which a bail is adapted to be passed, and with a nut on its end, an elastic plug held loosely on the pin of the yoke, and a washer also on the pin above the plug, substantially as described.

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Witnesses:

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