

(No Model.)

J. LIBROWICZ.
BOTTLE STOPPER.

No. 540,674.

Patented June 11, 1895.

Fig. 4.

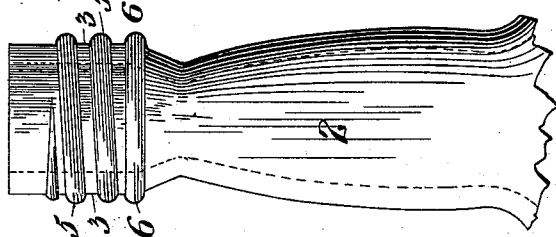


Fig. 3.

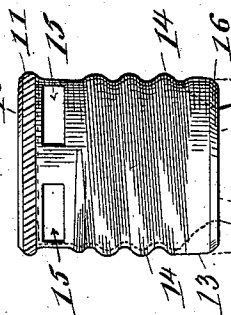


Fig. 2.

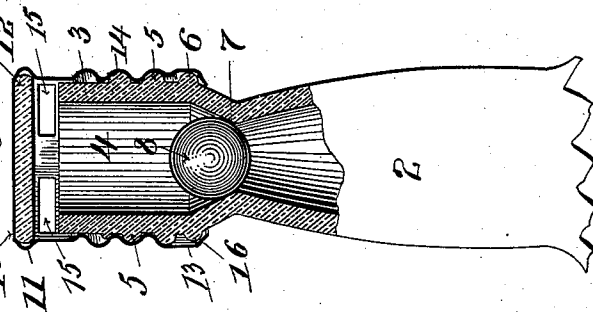
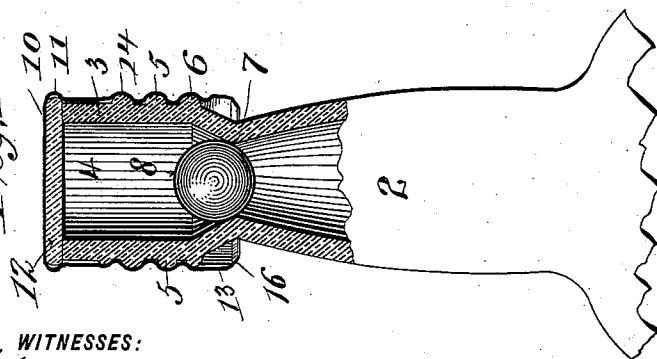


Fig. 1.



WITNESSES:

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JULIUS LIBROWICZ, OF BROOKLYN, NEW YORK.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 540,674, dated June 11, 1895.

Application filed September 24, 1894. Serial No. 523,873. (No model.)

To all whom it may concern:

Be it known that I, JULIUS LIBROWICZ, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Protective Bottle-Stoppers, of which the following is a specification.

My invention has relation to bottle stoppers or seals for bottles which are intended to be permanent in their nature, and has for its object to provide a seal which shall effectually close the bottle for shipment and for use, and also to provide devices for the prevention of unlicensed picking or opening of the seal for the purpose of refilling the bottle with a spurious article.

My invention is specially designed to be used by manufacturers or dealers in certain special brands of liquors, bitters and the like, so as to enable them to guard against the refilling of the bottle with an imitation of their particular brand of liquor, &c., after the genuine article has been removed.

My invention therefore resides in the construction and combinations of parts herein-after described and further pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a side elevation of a bottle, the neck and my improved stopper being in section and the bottle closed or sealed; Fig. 2, a like view with the cap raised to permit of the decanting of the bottle; Fig. 3, a side elevation of a portion of a bottle provided with my closing-cap; Fig. 4, a side elevation of the mouth portion of the bottle with the cap removed.

Similar numerals of reference refer to like parts throughout the several views.

In the drawings 1 indicates a bottle of any design or material, preferably glass, 2 the neck portion, and 3 the mouth. The mouth 3 is provided with an interior passage 4 and an exterior screw thread 5. At the termination of the threaded portion of the mouth is an annular shoulder 6, and between this shoulder and the neck portion of the bottle the passage 4 is constricted, so as to form an annular seat 7 adapted to receive and support a ball 8, preferably of glass. At 9 is a thin sheet metal cap, so called, provided at its top with a head 10 having a milled projection 11, and

below the head and within the projection 11 is confined an elastic disk 12, preferably of cork. The pendent portion 13 of the cap 9 is tubular and is provided with a screw thread 14 adapted to work upon the thread 5 on the bottle mouth. Between the cork disk 12 and the screw thread 14 the tube 13 of the cap is provided with transversely extending apertures 15 for permitting of the decanting of the bottle. When in the position indicated in Fig. 1, that is when closing or sealing the mouth of the bottle, the ferrule portion 13 of the cap extends some distance below the shoulder 6, and at its extreme end it is upset to form the inwardly extending and annular flange 16, which is adapted to strike the shoulder 6 when the cap is moved up on the screw thread.

The placing of the cap on the bottle and the operation of the device are as follows:

The prime motive of this construction being to prevent the filling of the bottle with spurious liquors, &c., I have designed the same so as to prevent the removal of the cap, and the forcing of liquor, &c., into the bottle when the mouth is unsealed. To this end I make the cap of metal capable of being spun but of sufficient stiffness to render it difficult to unspin or cut without leaving some exterior indication. The cap when completed and ready to place on the bottle has its lower portion tubular throughout, as indicated in dotted lines, Fig. 3, and is placed about the screw threads and turned down a sufficient distance, and when in position the annular flange is formed by spinning in the metal. Before putting on the cap, however, the ball seal 8 is dropped on to its seat. When the cap is screwed down, as in Fig. 1, the cork disk 12 bears on the annular top of the mouth 3, which forms a seat for it, which seals the bottle.

When the contents are to be decanted, the cap is screwed up until the apertures 15 are above the top of the mouth of the bottle, the bottle inclined, which will roll the ball 8 from its seat and permit of the passage of the contents of the bottle. When in this position it would be very difficult, if not impossible, to force liquid into the bottle; and the devious path extending from the apertures 15 to the ball, and its distance below the apertures, render it very difficult to lift the ball from its seat and maintain it in that position.

The flange 16 should extend close to the bottle to prevent a tool being inserted to turn it out, as well as to insure its engagement with the shoulder 6 to limit the upward movement of the cap and prevent its removal.

My device not only possesses great simplicity and economy in manufacture but has the great advantage over most devices for a like purpose that no metal comes in contact with the contents of the bottle, except during decanting; and furthermore it possesses a double seal, the ball preventing evaporation and the entry of dust, &c., when the cap is open.

It is apparent that many modifications in the disclosed structure can be made without departing from the spirit of my invention.

Having described the invention, I claim—

1. The combination, in a bottle stopper, of the exteriorly screw threaded mouth, the seat and movable ball within the mouth, a screw threaded cap movable on the exterior of the bottle, the cork disk in the head of the cap,

apertures in the cap below the cork, an annular shoulder on the mouth below its screw thread, and a flange on the cap for engagement with the shoulder, substantially as described.

2. In a bottle stopper, the combination, with the bottle mouth having the exterior screw thread and shoulder, of a cap having a head and cork disk, a screw thread for engaging that of the bottle, a flange for engaging said shoulder, apertures in said cap lying immediately below the said disk, a contracted seat formed in the bottle below the said thread and shoulder, and a movable ball on said seat, substantially as described.

Signed at the city, county, and State of New York this 21st day of September, 1894.

JULIUS LIBROWICZ.

Witnesses:

B. S. WISE,
JOSEPH L. LEVY.