

No. 847,791.

PATENTED MAR. 19, 1907.

J. W. LEE.

BOTTLE STOPPER.

APPLICATION FILED AUG. 31, 1906.

Fig. 1.

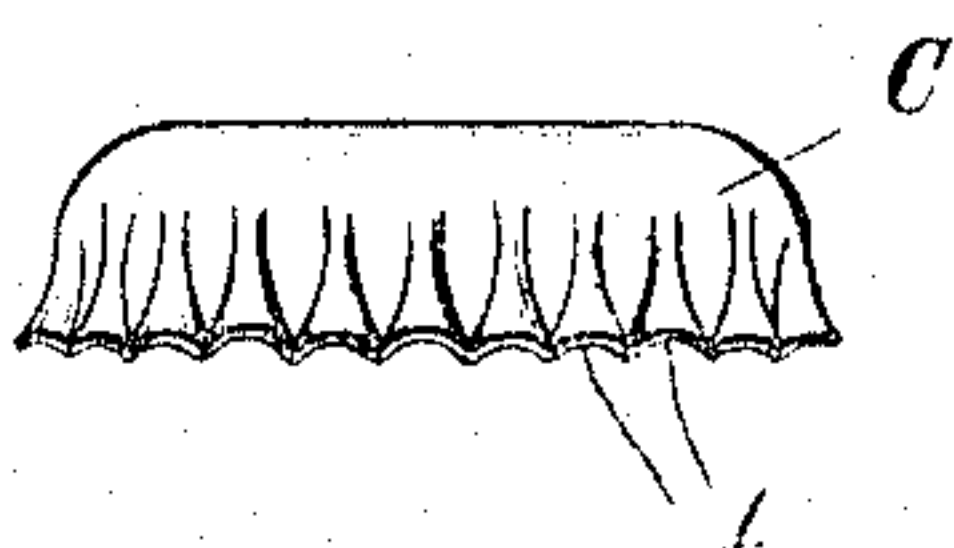


Fig. 2.

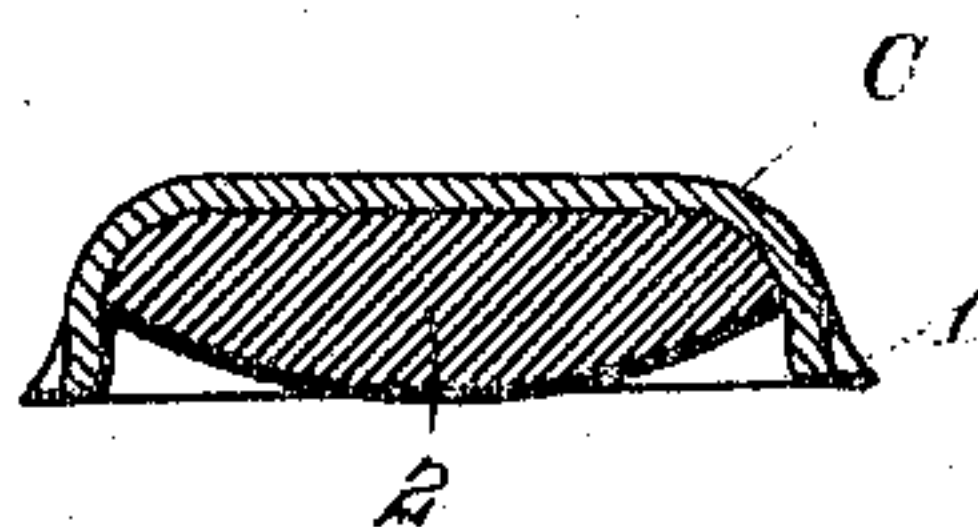
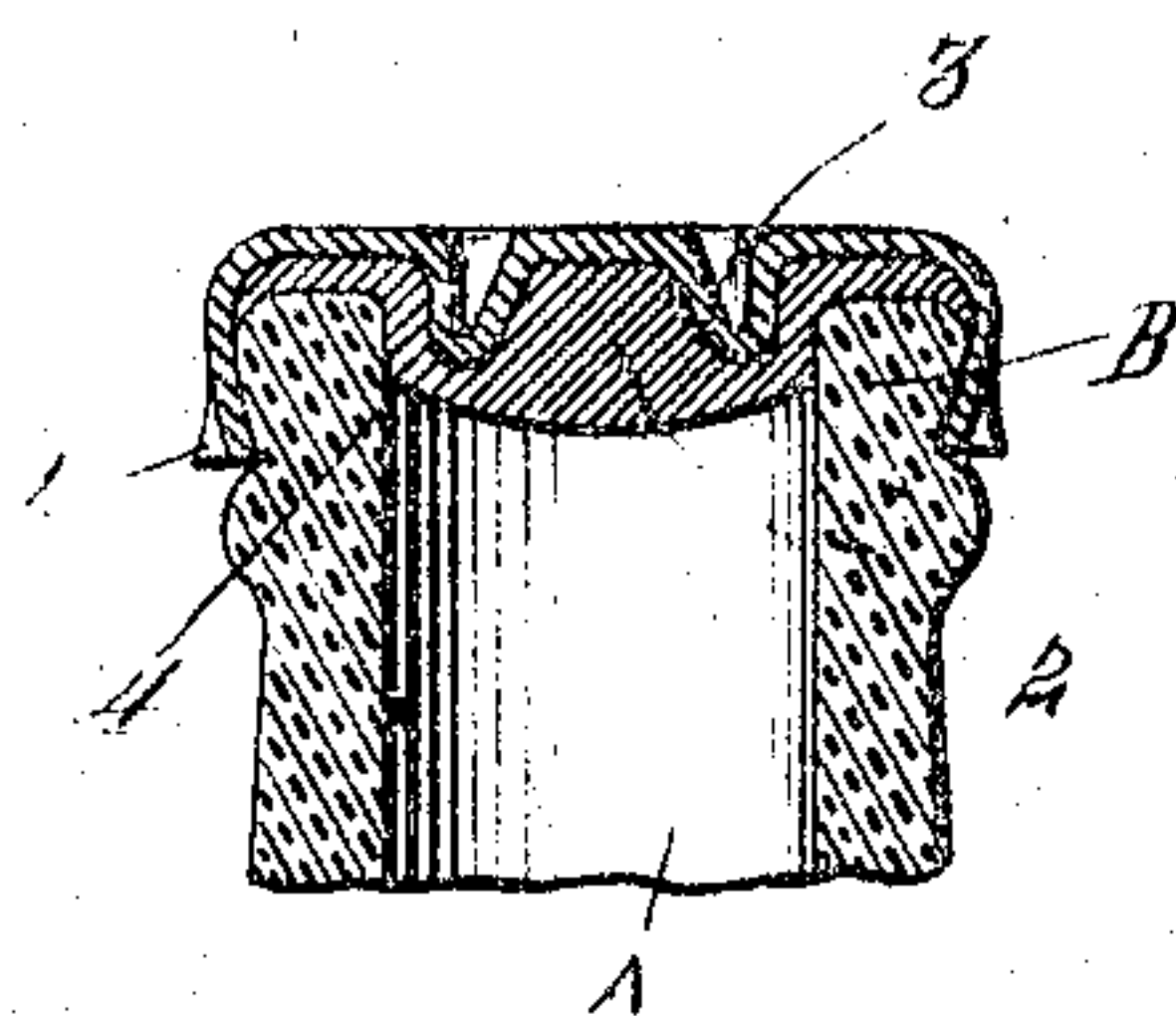


Fig. 3.



Witnesses

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JOHN WILLIAM LEE, OF WASHINGTON, DISTRICT OF COLUMBIA.

BOTTLE-STOPPER.

No. 847,791.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed August 31, 1906. Serial No. 332,823.

To all whom it may concern:

Be it known that I, JOHN WILLIAM LEE, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification.

My invention relates to an improvement in bottle-stoppers of the sheet-metal-sealing-cap variety.

The object is to provide a device of the character named which will effectually seal a bottle, notwithstanding the fact that there may be some irregularities in the edge of the bottle due to imperfect molding, fracture, or the like, which is liable to result in the escape of gas.

My invention contemplates doing away with the possibility of such results, and it comprises a cap of such construction that some soft material, such as cork or the like, is wedged into the mouth of the bottle for some distance and securely clamped in the end of the mouth and around the outer edge for some distance, so that a tight seal is formed around a sufficient area of the surface of the mouth of the bottle to preclude the possibility of the escape of gas, even if there is any irregularity in the edge of the bottle due to fracture, imperfect molding, or what not.

With the foregoing objects in view my invention consists in a sheet-metal cap lined within with cork or similar material, the center of which is appreciably thicker than the portion at the edge, the cap having its outer edge plain around the outer edge of the bottle-mouth and having an annular groove sunk into it after being placed upon the bottle, the outer edge of said groove substantially paralleling the bore of the bottle-neck and extending well into the bottle-neck and clamping or binding the cork or soft material thereagainst, so that the cork or equivalent material is held tight against the entire outer edge, as well as a portion of the interior of the mouth of the bottle.

My invention further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claim.

In the accompanying drawing, Figure 1 is a view in side elevation of the cap. Fig. 2 is a section through the cap previous to being secured to the bottle. Fig. 3 is a section through the same as it appears applied to the neck of a bottle.

A represents the neck of the bottle, this being of the ordinary construction and having the usual bead B formed at the outer edge. C is the cap, made of sheet metal and having a clamped flange 1 around the edge, as is customary in this type of bottle-caps. A lining 2 of cork or other material is held inside of the sheet-metal cap, it preferably having a convex lower surface to give fullness at its center.

The cap is applied by a machine for the purpose, and when applied an annular groove 3 is formed in its outer surface, the outer wall 4 of which extends parallel or approximately parallel with the wall of the neck, its function being to wedge the cork or other soft material well down into the neck to clamp it around a large area of the mouth portion of the bottle, as shown in Fig. 3, so that a gas and liquid tight seal is formed, which absolutely prevents the escape of the contents of the bottle.

From the foregoing it will be seen that the mouth of the bottle is clamped inside and outside and that the soft lining, whether it be cork or other material, is securely wedged between the outer wall 4 of the groove, the flange 1 and the top of the cap intervening therebetween.

The cap is easily made and applied with equal facility and is most effectual in the performance of the function required of it—namely, of making a tight seal.

More or less slight changes might be made in the form and arrangement of the several parts described without departure from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

The combination with a bottle-neck, of a lined cap adapted to have its peripheral

flange bent around the outer surface of the
bottle-mouth and have an annular in-
wardly-projecting ridge formed therein, said
ridge projecting into the neck approxi-
5 mately parallel with the inner wall of the
neck whereby an externally and internally
clamping cap is formed.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN WILLIAM LEE.

Witnesses:

HERBERT C. EMERY,
VERNON E. HODGES.