

(No Model.)

J. GILBERDS.

BOTTLE AND STOPPER CAP FOR THE SAME.

No. 475,448.

Patented May 24, 1892.

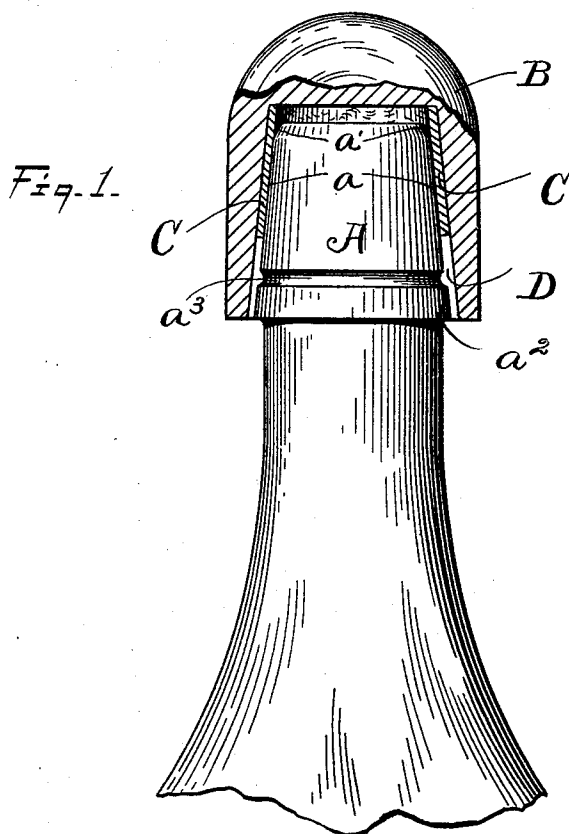
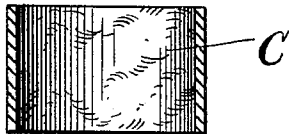


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES GILBERDS, OF JAMESTOWN, NEW YORK.

BOTTLE AND STOPPER-CAP FOR THE SAME.

SPECIFICATION forming part of Letters Patent No. 475,448, dated May 24, 1892.

Application filed September 24, 1891. Serial No. 406,730. (No model.)

To all whom it may concern:

Be it known that I, JAMES GILBERDS, of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Bottles and Stopper-Caps for the Same; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in bottles and stopper-caps for the same; and it consists more especially in a peculiar construction of the neck of the bottle and its stopper-cap, whereby the bottle is easily and hermetically sealed.

In the accompanying drawings, Figure 1 is a view in side elevation showing a bottle-neck with the cap applied thereto and a portion of the latter broken away. Fig. 2 is a central vertical section of the lining of the stopper-cap before its insertion in the latter.

A represents the neck of the bottle, the same being conical, as shown at *a*, and being beveled or chamfered at the mouth of the bottle, as shown at *a'*, for the purpose hereinafter described.

B represents the stopper-cap, the same being conical or tapering internally to approximately conform to the taper of the neck of the bottle. Cap B is preferably made of glass. The stopper-cap has attached, preferably cemented to the interior thereof, an annular or cylindrical yielding lining C, preferably of cork. This lining is forced into the cap until the foremost end abuts the interior top of the cap. The cylindrical or annular lining is just large enough to enter the mouth of the cap, and being straight before its insertion as it is forced to the interior top of the cap the lining is thereby more or less compressed, and it is evident that this compression more especially takes place in the upper part of the cylindrical or annular lining where it is important to have the pores of the lining closed as effectually as possible. By the compression of the lining, as just described, the elasticity of the latter without the use of cement will, in most instances, suffice to hold the lining imperturbably to its place in cap B.

In applying the stopper-cap it is forced down on the neck of the bottle with a slight

twist to the right, and by means of the peculiar construction aforesaid the farther the cap is forced downward the greater the compression of the lining C and the more perfectly the bottle is sealed. In removing the cap the same will readily yield by giving it a slight twist in the opposite direction—that is, to the left.

To insure against the possibility of any of the pores still remaining in open communication with the interior of the bottle, lining C should not quite extend to the bottom of the cap, so as to form a chamber, as at D, between the bottom of said lining and collar *a*² on the neck of the bottle for the reception of, for instance, sealing-wax, and a slight annular groove *a*³ is preferably provided in the neck of the bottle, so that in the introduction of the sealing-wax a key will be formed for the same; also, instead of having the neck of the bottle terminate at the mouth in a comparatively sharp or angular edge I bevel or chamfer the corresponding edge of my bottle, as at *a'*, whereby is avoided the cutting or tearing of lining C in the application of the stopper-cap.

What I claim is—

1. The combination, with a bottle-neck, of a cap adapted to embrace such bottle-neck, the cap having a lining of yielding material, such as cork, and an annular chamber located between the bottle-neck and cap outside the lining for sealing purposes, substantially as and for the purpose set forth.

2. The combination, with a bottle-neck terminating at the mouth of the bottle in a beveled or chamfered end, of a cap having a lining of yielding material, such as cork, such lining being compressed, substantially as indicated, and cemented to the interior of the cap, an annular chamber between the cap and the neck of the bottle outside the lining, and the bottle-neck having an annular groove communicating with said chamber, substantially as and for the purpose set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 12th day of September, 1891.

JAMES GILBERDS.

Witnesses:

M. R. SMITH,
WILLIAM A. NORRIS.