(No Model.)

B. P. KINCAID & C. D. CRICKLER.

BOTTLE STOPPER.

No. 458,282. Patented Aug. 25, 1891.

FIG. 1.

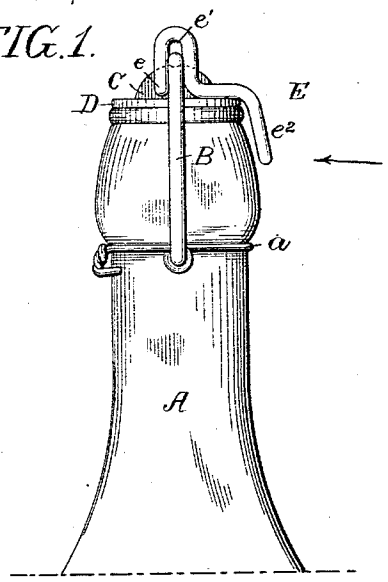


FIG. 2.

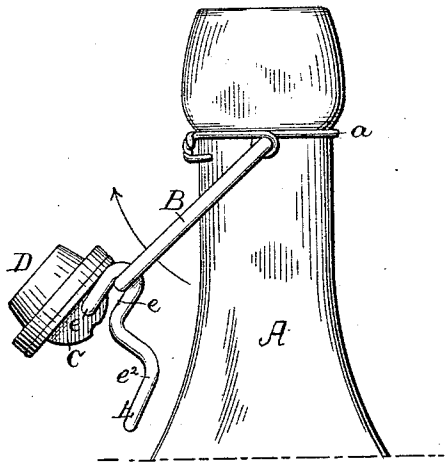


FIG. 5.

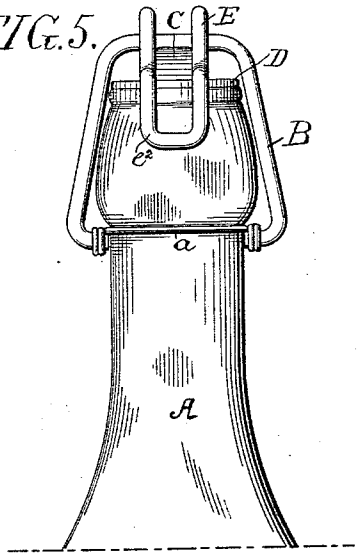


FIG. 3.

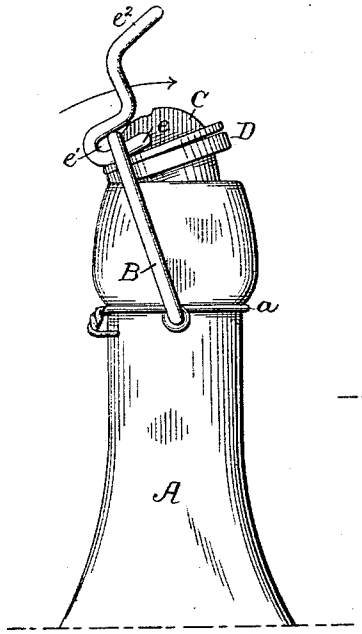
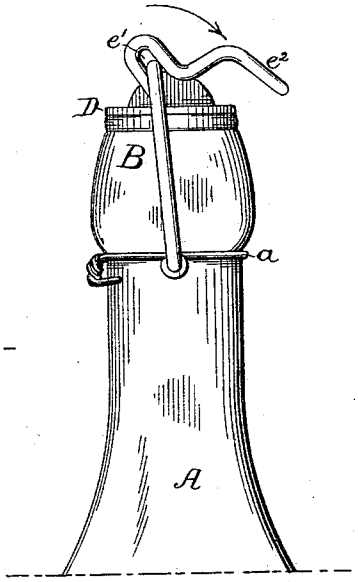


FIG. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BARRON P. KINCAID AND CHARLES D. CRICKLER, OF BRIDGETON, NEW JERSEY, ASSIGNORS TO SAID CRICKLER AND RICHARD TRENCHARD, OF SAME PLACE.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 458,282, dated August 25, 1891.

Application filed August 1, 1890. Serial No. 360,666. (No model.)

To all whom it may concern:

Be it known that we, BARRON P. KINCAID and CHARLES D. CRICKLER, both citizens of the United States, and residents of Bridgeton, Cumberland county, New Jersey, have invented certain Improvements in Bottle-Stoppers, of which the following is a specification.

Our invention consists in certain improvements in the construction of that class of bottle-stoppers in which the upper end of a pivoted bail is forced over a cam on the upper face of the stopper, as more fully described hereinafter.

In the accompanying drawings, Figure 1 is an elevation of a portion of a bottle, showing our improved stopper applied thereto. Fig. 2 is a similar view showing the bail and stopper thrown back. Figs. 3 and 4 are views showing the stopper in different positions on the bottle, and Fig. 5 is an elevation looking in the direction of the arrow, Fig. 1.

A represents a bottle of any ordinary make, to the neck-band *a* of which are pivoted the opposite ends of a bail B, the upper end of the bail being adapted to a cam C on the upper face of an ordinary elastic stopper D. The cam C is of such a construction with respect to the pivot-point of the bail B that as the bail nears the center it will force the stopper to the seat and thus seal the bottle.

E is a locking-lever pivoted at *e* to the cam C, and being bent in such a manner as to form an elongated slide *e'* for the looped end of the bail B. By means of this construction, as will be seen more clearly on reference to Figs. 3 and 4, the locking-lever E is made to exert considerable force on the end of the bail B and move it gradually up over the cam C, the elongated slideway of the locking-lever permitting the vertical movement of the bail as it is pushed over the cam. The lever E has a portion e^2, which is so bent that when the lever is in the position shown in Fig. 1 it is close to the bottle and will not be liable to accidental displacement. The lever also acts to unlock the stopper. When the stopper is unlocked, as shown in Fig. 2, the bail B cannot be separated from the locking-lever E, owing to the peculiar pivoting of the latter to the cam C, which overlaps the open end of the slide in the lever, thus doing away with the retaining-band usual on this character of stopper.

We are aware that it has been proposed to employ pivoted levers to force the bail of a bottle-stopper over a cam on the stopper; but in none of these patents, so far as we are aware, has there been employed a slotted locking-lever, a cam, and a hinged bail in which the free vertical movement of the bail with respect to the locking-lever is permitted, at the same time preventing lateral movement of the bail independent of the lever, as it will be understood on referring to the drawings that when the stopper is closed, as in Fig. 1, and the locking-lever in the position therein shown the bail is confined, preventing it moving laterally, and as it is forced upon the cam it is locked as regards vertical movement. The arrangement of parts is such that when the stopper is removed from the bottle, as shown in Fig. 2, the lever acts as a connecting-link between the bail and the stopper, the pivot of the lever on the bail being such that the cam portion of the stopper will close the slot, preventing the accidental detachment of the lever and stopper from the bail.

Having thus described our invention, we claim and desire to secure by Letters Patent—

1. The combination of a stopper, the pivoted bail, a cam on the stopper, and an operating-lever pivoted to the stopper and having a slideway embracing the loop of the bail, forming a connecting-link between the bail and the stopper, said lever being pivoted to the stopper and having its slideway closed by the cam, thus preventing the detaching of the bail, substantially as described.

2. The combination of the bail pivoted to the bottle, a stopper, a cam thereon, and an operating-lever pivoted to the stopper, said operating-lever having a bent portion forming an elongated slideway for the loop of the bail, said slideway being closed by the cam and vertically disposed when the stopper is in the closed position, thus locking the bail to the lever and preventing lateral movement of the bail without a movement of the lever, substantially as described.

3. The combination of the pivoted bail, a

stopper, a projection on the head of the stopper, a cam formed on said projection, a lever made from a single piece of bent wire, said lever being bent, substantially as described, forming a handle e^2, and a slideway e' for the bail, the ends of the wire being turned into openings in the projection on the stopper forming the pivot for the lever, substantially as and for the purpose set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

BARRON P. KINCAID.
CHAS. D. CRICKLER.

Witnesses:
V. D. FISHER,
WILLIAM B. TRENSHARD.