W. GEIST.

Bottle Stopper-Fastener.

No. 211,987. Patented Feb. 4, 1879

Fig. 1.

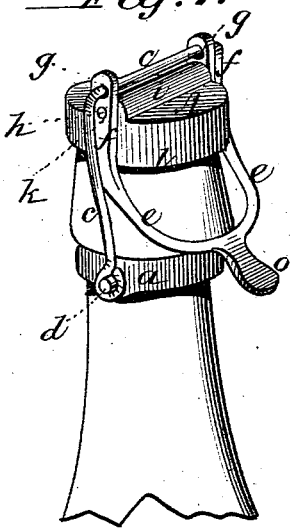


Fig. 2.

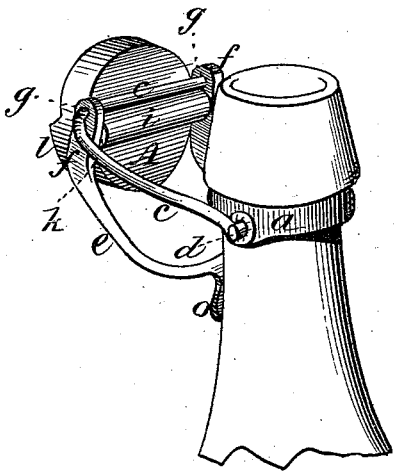


Fig. 3.

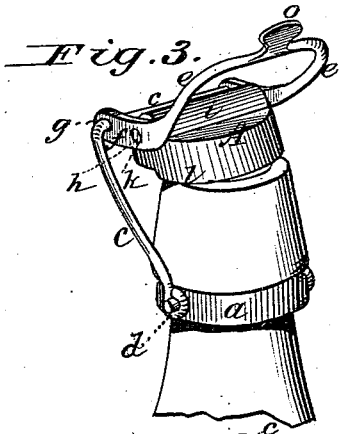


Fig. 4.

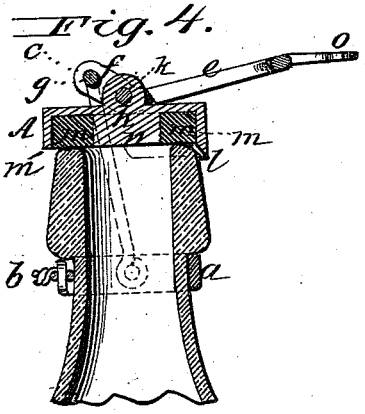


Fig. 5.

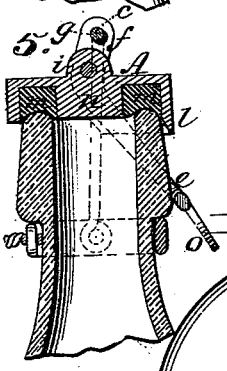


Fig. 6.

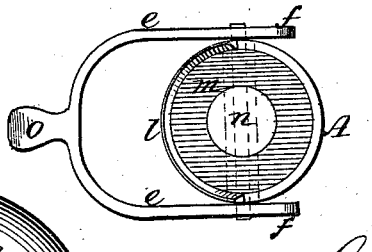
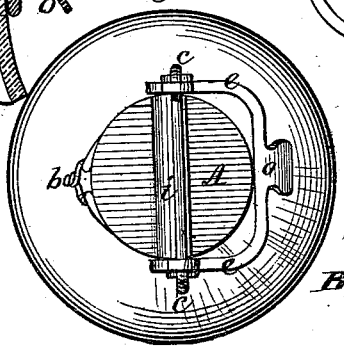


Fig. 7.



Attest:
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UNITED STATES PATENT OFFICE.

WILLIAM GEIST, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN BOTTLE-STOPPER FASTENERS.

Specification forming part of Letters Patent No. **211,987**, dated February 4, 1879; application filed November 30, 1878.

To all whom it may concern:

Be it known that I, WILLIAM GEIST, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Stoppers, of which the following is a specification:

This invention relates to the general class of bottle-stoppers, or particularly to hinged flexible-pad stoppers.

Flexible-pad stoppers have been made to bear down into the bottle's mouth by a variety of contrivances; but my improvements differ from these in many ways, and essentially in the construction and arrangement of bail, cap, and lever, by which the cap carrying the flexible pad is seated or adjusted without undue care, and without the necessity of manipulating the cap-pad itself, as has been hitherto required.

The invention will hereinafter be more particularly described, and its novel features specified in the claim.

In the accompanying drawings, Figure 1 represents a view, in perspective, of my improved bottle-stopper as applied to close a beer-bottle; Fig. 2, a similar view with the bottle open, showing the cap and lever thrown back; Fig. 3, a perspective view, showing the cap carrying the flexible pad in position to automatically seat itself, and the position of the lever in such case; Fig. 4, a vertical section, showing the cap seated and the position of the lever in such case; Fig. 5, a section with the cap fully seated and clamped down by the lever; Fig. 6, an inside view of the cap, and Fig. 7 a top view of the cap and its fastenings.

Around the neck of the bottle there is fastened a metallic clasp or band, *a*, secured by a wire tie, *b*, from which clasp the swinging bail *c* is caused to operate the bottle-stopping device. This bail *c* swings upon pins *d d* of the said band *a*, and is caused to so swing by a yoke-lever, *e*, which controls its movement when operated. The yoke-lever *e* has end arms, *f*, at an obtuse angle thereto, and flattened, wherein are made holes *g* at their extremes to receive the bail *c*, whereby said lever *e* may swing upon the bail, and holes *h* to receive the hinge or connection of the sealing-cap A, which is of metal, and has a top cross-piece, *i*, or ears carrying the bearings *k* or fulcrum for the holes *h* in the yoke-lever, and it has a semicircular extension, *l*, which acts as a seating-guide in the adjustment or seating. It carries upon its inner side the flexible-pad ring *m*, cast or forced around a central plug, *n*, as shown.

For the purpose of easily operating the yoke-lever *e*, I cast or form with it a thumb-piece, *o*, of a sufficient projection to permit of easy manipulation, but not large or long enough to be unwarrantably moved.

In operating the device, referring first to the closed bottle, Fig. 1, seize the bottle with the left hand, and push up the thumb-piece *o* with the thumb or index-finger of the right hand, when the cap will be thrown back upon the other side of the bottle in the position shown in Fig. 2.

To close the bottle is a very simple matter with this device, and with this operation the advantages of my invention are apparent, since no manipulation of a flexible pad or cap-piece is required, the whole seating operation being accomplished by the lever's movement in connection with the guide-extension *l* of the cap.

Grasping the bottle with the left hand, and seizing the thumb-piece *o* of the lever *e* with the thumb and index, or the index alone, of the right hand, the lever is drawn forward and over and the cap A over the bottle's mouth, as in Fig. 3, when the lever is pressed down upon the near side of the bottle, and the cap clamped down with its flexible ring in the mouth of the bottle, as seen in Figs. 4 and 5.

By reference to Fig. 3, it will be seen that the cap-extension *l* rides over the mouth of the bottle, and, in connection with the bail, as the lever is moved toward the operator, automatically places the cap A in position to be seated and clamped down.

The point of pivot of the cap upon the yoke-lever arms and the pivot-point of the said arms on the bail being near together, the cap cannot reverse itself, as in turning it would be arrested by the cross-piece of the bail.

The thumb-piece *o* of the yoke-lever may not be absolutely necessary; but I prefer to use it, since it is convenient and unobjectionable.

I claim—

In a bottle-stopper, the metallic cap A, (carrying the stopping-pad,) provided with downward semicircular extension *l*, in combination with the swinging bail *c* and the yoke-lever *e*, provided with angular arms *f*, in which said cap swings, all substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM GEIST.

Witnesses:
JOHN E. CLAY,
T. T. HEADLEY.