

E. D. WEATHERBEE.

CORK FASTENERS FOR BOTTLES.

No. 177,599.

Patented May 16, 1876.

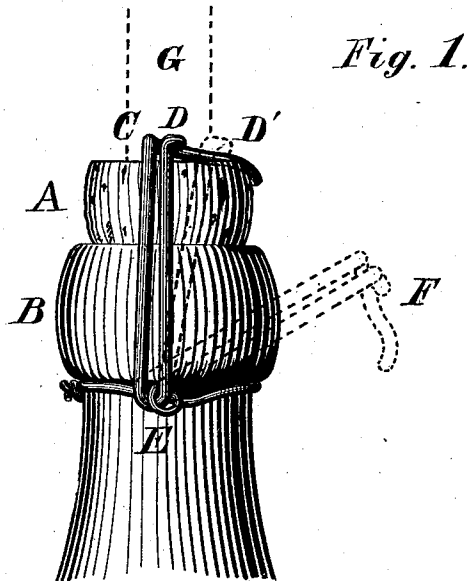


Fig. 2.

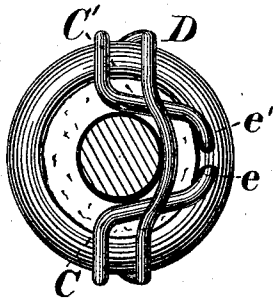
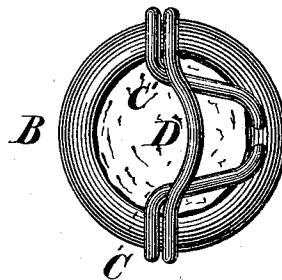


Fig. 3.



Witnesses:

Edward H. Hill.

James Greene

Inventor;

E. D. Weatherbee

By his Atty.,
James G. Arnold

UNITED STATES PATENT OFFICE.

EPHRAIM D. WEATHERBEE, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN CORK-FASTENERS FOR BOTTLES.

Specification forming part of Letters Patent No. **177,599**, dated May 16, 1876; application filed January 24, 1876.

To all whom it may concern:

Be it known that I, EPHRAIM D. WEATHERBEE, of the city and county of Worcester, State of Massachusetts, have invented an Improved Cork-Fastener for Bottles, of which the following is a specification:

My invention relates to that class of fasteners that are used by swinging or turning off from the top of the cork to release it, and turned on when the bottles are filled and the cork put in place.

It is designed to form a more secure holder or fastener, and prevent the canting or rising up of one side and escape of the gas, as is frequently the case in the common form when the wire of either side rests on a flaw or defective place in the cork, and to do this by the use of two arms resting on the cork, and a cross-bar over them crossing over the center of the cork, or nearly so.

In the accompanying drawings, forming a part of this specification, Figure 1 shows a cork-fastener as in use embodying my invention. Fig. 3 shows a top view of the same, Fig. 2 showing the position of the parts just before taking away the plunger.

A is the cork; B, the bottle. C C' are the two arms, formed near the ends of the wire, the middle of which forms the bar D, which crosses over the arms C C', and the intermediate parts form loops, one on each side, by means of which it is jointed and secured to the neck of the bottle, as at E. A small part of the ends of the arms C C' are turned inward and slightly downward, as at *ee*, to give a smooth finish, and prevent the fastener being pushed too far on. These should not meet and interfere with the two arms springing together when the plunger is removed. The loops at the sides, by their continuation down to the connection at the neck of the bottle, form a pair of springs on each side, and give a twofold spring action to the parts, viz., that of the two arms C C' toward and from each other, and that of the bar D toward and from them.

Thus in operation, the fastener being off, as at F, the bottle is filled, and the cork is forced in by the plunger in the usual way. The operator turns up the fastener, and presses it on by pressing against the ends *ee*. The two arms C C' open a little, and pass each side of the plunger, while the bar D is stopped

by it, as shown in Fig. 2, the springs allowing C C' to be pushed clear on the plunger now being removed from the cork. The springs press the arms C C' toward each other, and at the same time force the bar D to a more central position.

It will be seen that the spring-pressure on the arms C C' holds against the tendency to strip, so common in fasteners when they happen to bear on a defective part of the cork, resulting in the canting or rising up of one side and the escape of the gas. This is also prevented in my invention by the bar D, against which the cork will hit and be held before it can rise more than the thickness of the arms C C', which may be flattened, if thought best.

The bar D is shown with a slight curve. This is not essential, as a straight form will work well, the spring action bringing it over the central part of the cork.

A curved form may be more convenient where a very stiff one is wanted, and the arms C C' may be made parallel, if desired, though I prefer them slightly converging.

What I claim as new is—

1. A cork-fastener, formed as shown, having two parts, C C', passing under a third, D, and making an H form around the plunger, and bearing on the top of the cork, and suitably jointed and secured to the neck of the bottle, substantially as above set forth.

2. A cork-fastener, composed of two parts, having a third or top bar crossing them on the top of the cork, and connected to them by spring-connections at the sides, so as to yield slightly when the fastener is forced on beyond the plunger, and to spring into a central position when the plunger is removed, the whole suitably jointed and connected to the neck of the bottle, substantially as above described.

3. A cork-fastener, consisting of the combination of two or more separate bearing parts, which spring apart to pass the plunger, allowing them to be pressed on while the cork is held by the plunger, all suitably connected to the neck of the bottle.

EPHRAIM D. WEATHERBEE.

Witnesses:

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JAMES GREENE.